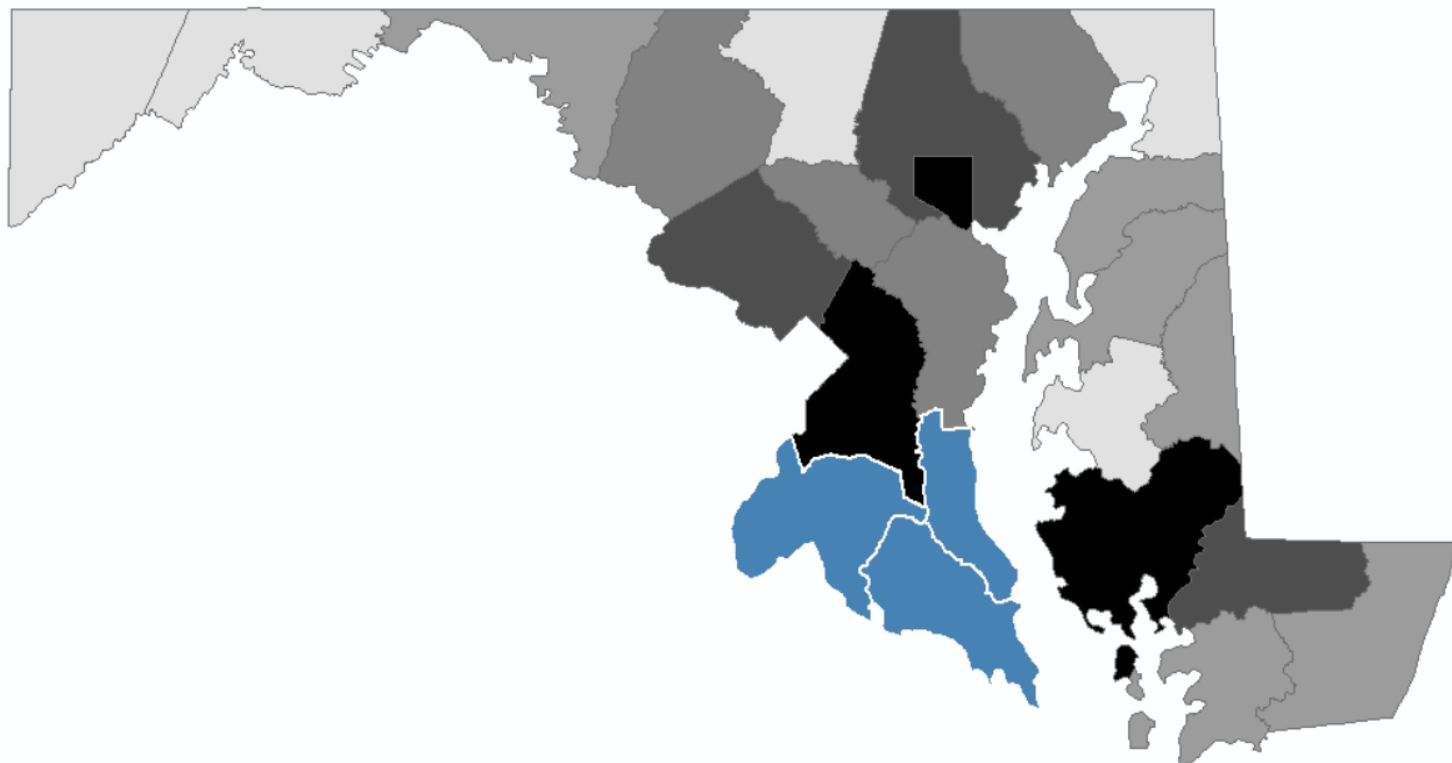


# 2016



## Southern Region HIV Annual Epidemiological Profile

Data reported through June 30, 2017

Center for HIV Surveillance, Epidemiology and Evaluation  
Infectious Disease Prevention and Health Services Bureau  
Prevention and Health Promotion Administration  
Maryland Department of Health  
<http://phpa.health.maryland.gov/OIDEOR/CHSE>  
1-800-358-9001

# Acknowledgements

This report is published by The Center for HIV Surveillance, Epidemiology and Evaluation annually with valuable contribution from the following people listed. In addition, this report would not have been possible without the cooperation, dedication and hard work of HIV health care providers, local health departments, community groups, researchers, and members of the community.

## *Center for HIV Surveillance, Epidemiology and Evaluation*

Colin Flynn, Chief  
Jami Stockdale, Deputy Chief, Epidemiology and Evaluation  
Reshma Bhattacharjee, Deputy Chief, HIV Case Surveillance

Alyssa Arey, Epidemiologist  
Morgan Boyer, Epidemiologist  
Harold Boykin, Epidemiologist  
James Carrier, Epidemiologist  
Molly Gribbin, Epidemiologist  
Jennifer Lawall, Epidemiologist

Leigh Carels, Surveillance Investigator  
Phyllis Finch, Surveillance Investigator  
Delwar Hossain, Surveillance Investigator  
Bekele Mamo, Surveillance Investigator  
Winona Matthews, Surveillance Investigator  
Carly Stokum, Surveillance Investigator  
Assefa Tigeneh, Surveillance Investigator  
Denise Bannerman-Wood, Data Quality Specialist/NIR Coordinator

Yvonne Childress, Data Specialist  
Kathy Colburn, Data Specialist  
Lillian Keene, Data Specialist

Nancy McCaslin, Research Statistician  
Stephanie Okehie, Research Statistician  
Marilyn Walkins, Health Record Reviewer

Linda Knapp, Evaluator  
Hemil Dhami, Research Statistician

Suggested Citation: Southern Region Annual HIV Epidemiological Profile 2016. Center for HIV Surveillance, Epidemiology and Evaluation, Maryland Department of Health, Baltimore, MD. 2017.

# Table of Contents

<b>Acknowledgements .....</b>	<b>2</b>
<b>Table of Contents .....</b>	<b>3</b>
<b>Section I – Background Information .....</b>	<b>5</b>
HIV/AIDS Reporting Requirements .....	5
For Assistance with HIV/AIDS Reporting .....	5
Limitations in the HIV/AIDS Data .....	5
Stages of a Case of HIV/AIDS .....	6
Changes in Case Terminology .....	6
Laboratory Data .....	7
Sources of Data .....	7
Tabulation of Column Totals .....	7
Data Suppression .....	7
HIV Exposure Categories .....	7
<b>Section II – Trends 1985-2016 .....</b>	<b>10</b>
Figure 1 – Trends in Reported HIV and AIDS Diagnoses and Deaths, 1985-2016, Reported through 6/30/2017 .....	10
Figure 2 – Trends in Living HIV Cases, 1985-2016, Reported through 6/30/2017 .....	11
Figure 3 – Trends in Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, 1985-2016, Reported through 6/30/2017 .....	12
Figure 4 – Trends in Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, 1985-2016, Reported through 6/30/2017 .....	14
Figure 5 – Trends in Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, 1985-2016, Reported through 6/30/2017 .....	16
Figure 6 – Trends in Adult/Adolescent Reported HIV Diagnoses by Estimated Exposure Category, 1985-2016, Reported through 6/30/2017 .....	18
<b>Section III – Adult/Adolescent Cases by Jurisdiction .....</b>	<b>20</b>
Table 1 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Jurisdiction of Residence at HIV Diagnosis, Reported through 6/30/2017 .....	20
Table 2 – Adult/Adolescent AIDS Diagnoses during 2016, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction of Residence at AIDS Diagnosis, Reported through 6/30/2017 .....	20
Table 3 – Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Residence at Diagnosis, Reported through 6/30/2017 .....	21
Table 4 – Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Residence at Diagnosis or Current Residence, Reported through 6/30/2017 .....	21
Table 5 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Current Residence, Reported through 6/30/2017 .....	22
Table 6 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Current Residence, Reported through 6/30/2017 .....	22
<b>Section IV – Continuum of Care Cascades .....</b>	<b>23</b>
Figure 7 – Prevalence-Based Estimated Adult/Adolescent 2016 HIV Continuum of Care Cascades, Current Southern Region Residents, Reported through 6/30/2017 .....	23
Figure 8 – Diagnosis-Based Estimated Adult/Adolescent 2016 HIV Continuum of Care Cascades, Current Southern Region Residents, Reported through 6/30/2017 .....	24
<b>Section V – Cases by Age .....</b>	<b>25</b>
Table 7 – HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Age at HIV Diagnosis, Reported through 6/30/2017 .....	25
Table 8 – HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017 .....	26
Table 9 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017 .....	27
Table 10 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017 .....	27
<b>Section VI – Adult/Adolescent Cases by Demographics .....</b>	<b>28</b>
Table 11 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Sex at Birth, Race/Ethnicity, and Country of Birth, Reported through 6/30/2017 .....	28
Table 12 – Adult/Adolescent Living HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity, and Country of Birth, Reported through 6/30/2017 .....	30

Table 13 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2017 .....	31
Table 14 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2017 .....	32
<b>Section VII – HIV Cases by Expanded Demographics.....</b>	<b>33</b>
Figure 9 – Population Pyramids of Total Living HIV Cases by Current Age, Sex at Birth, and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017 .....	33
Table 15 – Total Living Male HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017 .....	34
Table 16 – Total Living Female HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017 .....	35
<b>Section VIII – HIV Exposure Category.....</b>	<b>36</b>
Figure 10 – Proportion of Adult/Adolescent Total Living HIV Cases, by Estimated Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on 12/31/2016, Reported through 6/30/2017 .....	36
Table 17 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result, by Exposure Category and Sex at Birth, Reported through 6/30/2017 .....	38
Table 18 – Adult/Adolescent Living HIV Cases Alive on 12/31/2016, by Exposure Category and Sex at Birth, Reported through 6/30/2017 .....	40
Table 19 – Adult/Adolescent Total Living HIV Cases by Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on 12/31/2016 and Reported through 6/30/2017 .....	41
Table 20 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Exposure Category, Reported through 6/30/2017 .....	42
Table 21 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Exposure Category, Reported through 6/30/2017 .....	42
<b>Section IX – Disease Progression and Mortality.....</b>	<b>43</b>
Figure 11 – Trends in Disease Progression by Year of HIV Diagnosis, 1985-2015, Reported through 6/30/2017 .....	43
Figure 12 – Trends in Survival Times by Year of AIDS Diagnosis, 1985-2015, Reported through 6/30/2017 .....	44
<b>Section X – Pediatric Cases .....</b>	<b>45</b>
Figure 13 – Trends in Pediatric HIV Cases, 1985-2016, Reported through 6/30/2017 .....	45
Table 22 – Pediatric HIV Total Living HIV Cases, Diagnosed in Maryland, Alive on 12/31/2016, by Jurisdiction, Reported through 6/30/2017 .....	46
Table 23 – Pediatric Total Living HIV Cases, Diagnosed in Maryland, by Sex at Birth and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017 .....	47
<b>Glossary of Terms.....</b>	<b>48</b>

# Section I – Background Information

## HIV/AIDS Reporting Requirements

The Maryland HIV/AIDS Reporting Act of 2007 went into effect on April 24, 2007. The law expanded HIV/AIDS reporting and required that HIV cases be reported by name. The following highlights the reporting requirements of Health-General Articles 18-201.1, 18-202.1, and 18-205 of the Annotated Code of Maryland, as specified in the Code of Maryland Regulations (COMAR) 10.18.02.

- Physicians are required to report patients in their care with diagnoses of HIV or AIDS immediately to the Local Health Department where the physician's office is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Physicians are required to report infants born to HIV positive mothers within 48 hours to the Maryland Department of Health by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Clinical and infection control practitioners in hospitals, nursing homes, hospice facilities, medical clinics in correctional facilities, inpatient psychiatric facilities, and inpatient drug rehabilitation facilities are required to report patients in the care of the institution with diagnoses of HIV or AIDS within 48 hours to the Local Health Department where the institution is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone. Facilities with large volumes are encouraged to contact the Maryland Department of Health to establish electronic reporting.
- Laboratory directors are required to report patients with laboratory results indicating HIV infection (e.g., positive confirmatory HIV diagnostic tests, all CD4 immunological tests, all HIV viral load tests, and all HIV genotype and phenotype tests) within 48 hours to the Local Health Department where the laboratory is located, or if out of state to the Maryland Department of Health, by mailing the State of Maryland HIV/CD4 Laboratory Reporting Form (DHMH 4492). Laboratories are encouraged to contact the Maryland Department of Health to establish electronic reporting.

Reporting forms and instructions, including mailing addresses and phones numbers, are available on our website: <https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/reporting-material.aspx>

## For Assistance with HIV/AIDS Reporting

For assistance with reporting, including establishment of routine, electronic, or other alternate methods of reporting to the Maryland Department of Health, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

## Limitations in the HIV/AIDS Data

This epidemiological profile only contains data for HIV and AIDS cases that have been diagnosed by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of 12/31/2016. Nationally, it has been estimated that 15.0% of people living with HIV infection are undiagnosed. In Maryland, it has been estimated that 15.3% of people living with HIV infection are undiagnosed. In addition, despite a massive effort during which over 17,000 HIV cases were reported after the Maryland HIV reporting law changed on April 24, 2007, not all diagnosed HIV cases previously reported by Maryland's code-based identifier were located and re-reported by name. Many of the re-reported HIV cases were identified by a recent diagnosis and not by their earliest diagnosis, resulting in an under-reporting of HIV diagnoses before 2001 and an over-reporting of HIV diagnoses from 2001 to 2008. Surveillance is the ongoing systematic collection, analysis, interpretation, and dissemination of case report data. Case report data are only available for cases receiving medical care, often only at facilities in Maryland, and only includes information that has been reported to the health department. Linkage to care data is based solely on laboratory data reported to the health department.

This epidemiological profile provides estimates of living Maryland diagnosed cases by current residence as of 12/31/2016. Residence at diagnosis is used exclusively to describe new HIV and AIDS diagnoses. Current residence data are restricted

to cases for which there is a case report form or laboratory test reported between 1/1/2009 and 6/30/2017. Restricting address data to recent years presents the most accurate data available and helps to account for cases that may have moved out of state whose data would no longer be reported in Maryland. However, current residence data excludes cases that may still be residents of Maryland but have not received any HIV care during the most recent eight and a half years. In addition, residence is dynamic and cases may have resided at multiple addresses that cannot all be represented in single time point estimates.

For additional information regarding current residence, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

## Stages of a Case of HIV/AIDS

Untreated HIV disease progresses from HIV infection to AIDS to death. These are biological events that occur whether or not a person receives any medical care. For example, a person can be HIV infected but never have an HIV test and so they do not have an HIV diagnosis. A medical provider diagnoses that these biological events have occurred and records them as a medical event. The law requires medical providers to report these medical events to the Health Department, thereby creating a surveillance event.

Time Point	Biological Event	Medical Event	Surveillance Event
1	HIV Infection		
2		HIV Diagnosis	
3			HIV Report
4	AIDS Conditions		
5		AIDS Diagnosis	
6			AIDS Report
7	Death		
8		Death Diagnosis	
9			Death Report

A case of HIV/AIDS can only move through time in one direction, from HIV infection to death report [from time point 1 to time point 9], but may skip over individual stages. Events can occur simultaneously, but usually there is a time lag between them. The time lag between events can be measured in days, months, and years.

For example, the time between HIV infection [time point 1] and the test that diagnoses HIV [time point 2] may be several years, and it may then take several days for the laboratory and physician to report the diagnosis to the health department [time point 3]. In a second example, a person with diagnosed and reported HIV infection [time point 3] may die [time point 7] without developing AIDS, thereby skipping the three AIDS events (conditions, diagnosis, and report [time points 4, 5 and 6]). And in a third example, a person with undiagnosed HIV infection [time point 1] may become sick, enter the hospital, and die [time point 7] of what is later determined to be AIDS. In that situation, HIV diagnosis [time point 2], AIDS diagnosis [time point 5], and death diagnosis [time point 8] would all occur at the same time, and that would probably be many years after the initial HIV infection [time point 1].

## Changes in Case Terminology

The terminology for HIV and AIDS cases was changed from earlier epidemiological profiles to be more precise, with Reported Diagnoses replacing Incidence and Living Cases replacing Prevalence. Incidence is a measure of the number of new events (such as HIV infections) in a population during a period of time. Prevalence is a measure of the number of people living with a condition (such as HIV) in a population at a certain time. Prevalence includes both newly and previously diagnosed cases as well as undiagnosed infections. For HIV, Incidence and Prevalence cannot be directly measured and must be estimated using statistical methods. The HIV surveillance system is able to provide the actual number of diagnoses and deaths that are reported in the population.

For this epidemiological profile, the reports received through a certain time (six months after December 31<sup>st</sup> of the specified year) are used to generate the number of diagnoses during the prior years. This lag time allows for delays in reporting and time to complete investigations. Instead of the previous one-year lag, this epidemiological profile utilizes a six-month lag,



and as a result, data on exposure category and deaths for the prior year are preliminary. For example, the Reported HIV Diagnoses for 2016 are the total of the reported HIV cases with or without an AIDS diagnosis, diagnosed with HIV during 1/1/2016-12/31/2016, as reported by name through 6/30/2017.

To calculate the number of Living Cases we count up all of the Reported Diagnoses from the beginning of the epidemic (all the new cases each year) and subtract all of the Reported Deaths. For example, the Total Living HIV Cases on 6/30/2017 are the total of the reported HIV Cases with or without an AIDS diagnosis and not reported to have died as of 12/31/2016 as reported by name through 6/30/2017.

## Laboratory Data

CD4+ T-lymphocyte tests are measures of a person's immune system function. An HIV infected adult is considered to have AIDS if they have less than 200 CD4+ cells per microliter of blood or if the percent of T-Lymphocyte cells that are CD4+ cells is less than 14%. Viral load (VL) tests are measures of the amount of HIV in a person's body. The goal of HIV treatment is to have a very low number of copies of virus per milliliter of blood, below what the test can measure, which is called an undetectable level. Low levels of VL, such as less than 200 copies per milliliter of blood, are known as viral suppression. Treatment recommendations are that a person in HIV medical care should have their CD4 and VL levels measured regularly, at least once per year. We use the presence of these lab tests as an indicator that someone has been "linked to care" after diagnosis or is "retained in care."

## Sources of Data

Information on HIV and AIDS diagnoses, including residence at diagnosis, age, race/ethnicity, sex at birth, current gender, country of birth, vital status, HIV exposure category, and CD4 and HIV viral load test results are from the Maryland Department of Health's Enhanced HIV/AIDS Reporting System (eHARS), June 30, 2017.

Population data by sex, age, and race/ethnicity are from the July 1, 2016 U.S. Census Estimates. Population data by country-of-birth are from the Census Bureau's 2015 American Community Survey. This produces a difference in total population due to the different source. Due to estimation limitations, some population totals may not equal the sum of its components. When needed, age groups were divided by assuming uniform age distribution within the age group. Non-Hispanic multiple race and Non-Hispanic some other race from the Census were combined into one group.

Estimations of those undiagnosed are from Centers for Disease Control and Prevention's 2015 HIV Surveillance Supplemental Report published July 2017. The continuum of care is adapted from a 2011 article in Clinical Infectious Diseases in which a continuum of care "cascade" is used to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

## Tabulation of Column Totals

Numbers in figures, tables and generally in the text have been rounded. Discrepancies in tables between totals and sums of components are due to rounding.

## Data Suppression

In order to protect the confidentiality of reported HIV cases, data are suppressed in the following instances:

- Data describing a demographic group or geographic area (e.g. ZIP code) with a population less than 1,000 people.
- All clinical/laboratory information if it is describing less than 5 cases.
- All exposure/risk information if it is describing less than 5 cases, except in the case of "other" exposure.
- If any cell is suppressed, additional cells are also suppressed as necessary to prevent back calculation of the suppressed cell(s).

## HIV Exposure Categories

The Centers for Disease Control and Prevention (CDC) developed a hierarchy of exposure categories for surveillance purposes. Persons with more than one reported risk factor are classified in the exposure category listed first in the hierarchy and therefore counted only once. Men who have sex with men and report injection drug use constitutes a separate transmission category.

**MSM/IDU:** Men who report a history of sexual contact with other men who also have engaged in injection drug use.

**Men who have Sex with Men (MSM):** Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

**Injection Drug Use (IDU):** Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

**Heterosexual Exposure (HET):** Men or women who report a history of sexual contact with a person of the opposite sex who is known to have an HIV infection or at high risk for an HIV infection. High risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue and artificial insemination.

**Perinatal Exposure:** Any baby born to an HIV positive mother.

**Other Exposure:** Includes men or women who received clotting factor for hemophilia/coagulation disorder, or received a transfusion of blood/blood components, or received a transplant of tissue/organs or artificial insemination, or worked in a health care or clinical laboratory setting.

Not all exposure data is reported and is therefore missing for some cases. Multiple imputation is a statistical method by which missing exposure categories are replaced with estimated or probable exposure categories. Multiple imputation involves filling in the missing exposure category with multiple possible exposures, creating several complete datasets. Filling in the missing exposure category is done using the observed data for the individual case as well as data in aggregate from other cases in Maryland. The complete datasets, containing the various predictions for each missing exposure category, are combined to create a final dataset with previously missing exposure category replaced by weighted estimates.



## **MDH Non-Discrimination Statement**

The Maryland Department of Health (MDH) complies with applicable Federal civil right laws and does not discriminate on the basis of race, color, national origin, age, disability in its health programs and activities.

### **English**

Help is available in your language: 410-767-5227 (TTY: 1-800-735-2258). These services are available for free.

### **Español/Spanish**

Hay ayuda disponible en su idioma: 410-767-5227 (TTY: 1-800-735-2258). Estos servicios están disponibles gratis.

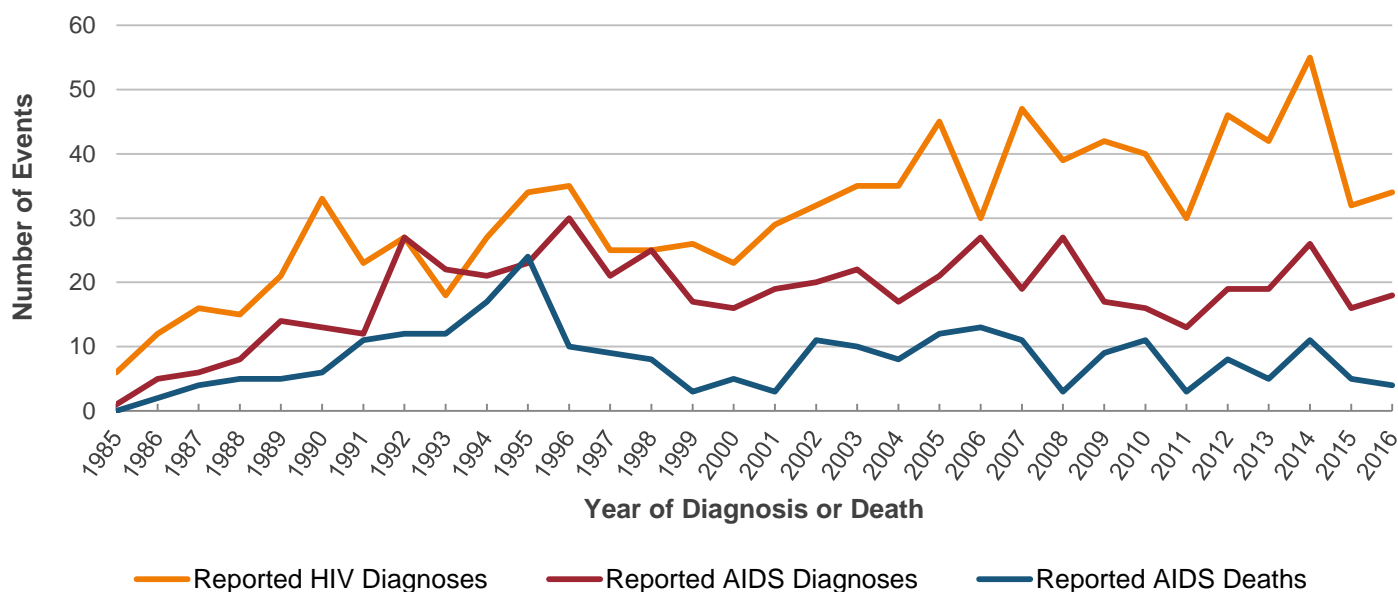
### **中文/Chinese**

用您的语言为您提供帮助: 410-767-5227 (TTY: 1-800-735-2258). 这些服务都是免费的

## Section II – Trends 1985-2016

**Figure 1 – Trends in Reported HIV and AIDS Diagnoses and Deaths, 1985-2016, Reported through 6/30/2017**

Reported HIV Cases with or without an AIDS Diagnosis (Reported HIV Diagnoses) by Year of HIV Diagnosis, Reported HIV Cases with an AIDS Diagnosis (Reported AIDS Diagnoses) by Year of AIDS Diagnosis, and Reported HIV Cases with an AIDS Diagnosis Reported to have Died of Any Cause (Reported AIDS Deaths) by Year of Death, from 1985 through 2016 as Reported through 6/30/2017



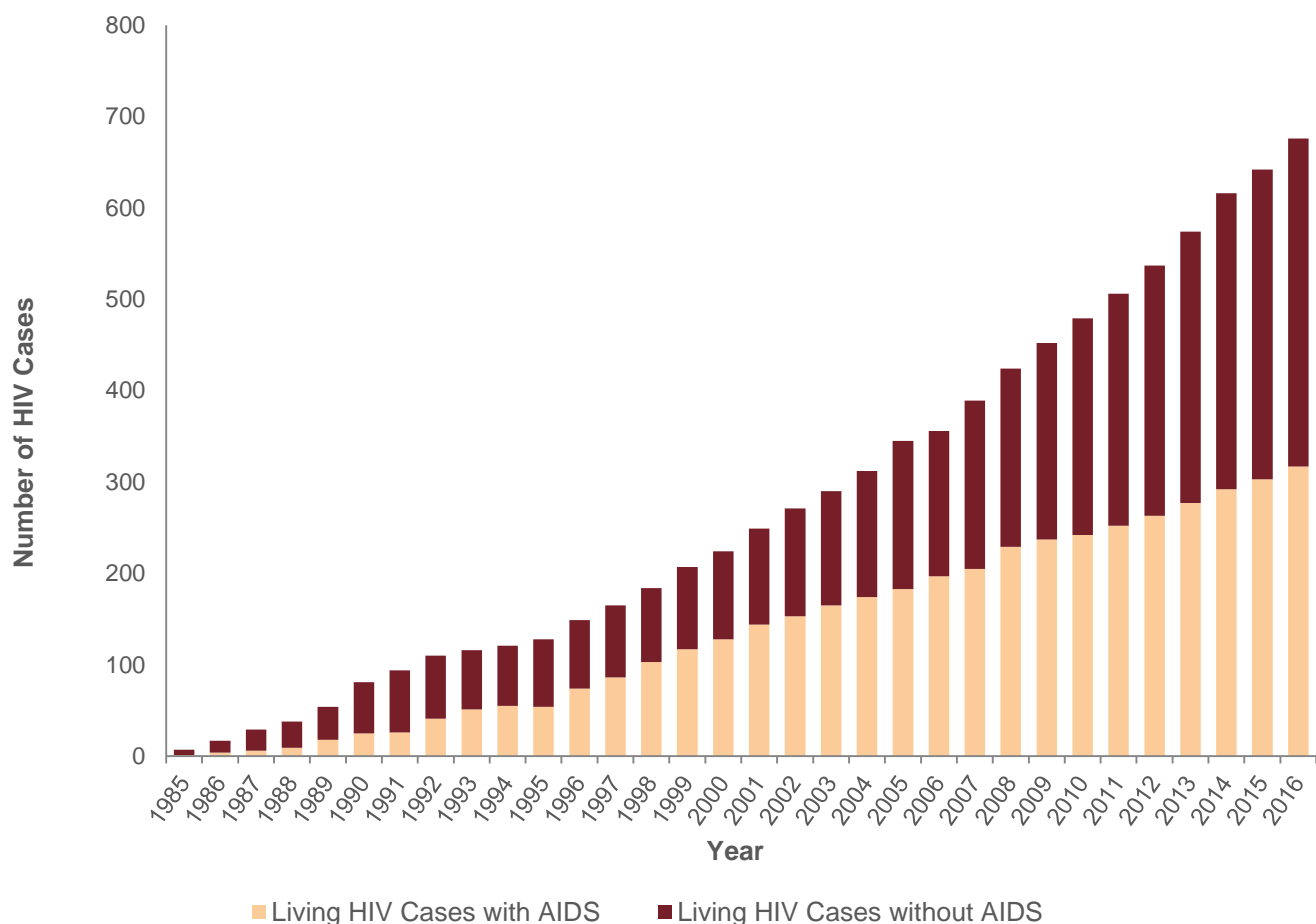
During the 2007-2008 transition to name-based reporting, many HIV cases were reported by a recent HIV diagnosis and not by their earliest HIV diagnosis, resulting in an artificial upward trend in HIV diagnoses during the period 2001-2008.

YEAR OF DIAGNOSIS OR DEATH	REPORTED HIV DIAGNOSES	REPORTED AIDS DIAGNOSES	REPORTED AIDS DEATHS	YEAR OF DIAGNOSIS OR DEATH	REPORTED HIV DIAGNOSES	REPORTED AIDS DIAGNOSES	REPORTED AIDS DEATHS
<1985	2	1	1	2001	29	19	3
1985	6	1	0	2002	32	20	11
1986	12	5	2	2003	35	22	10
1987	16	6	4	2004	35	17	8
1988	15	8	5	2005	45	21	12
1989	21	14	5	2006	30	27	13
1990	33	13	6	2007	47	19	11
1991	23	12	11	2008	39	27	3
1992	27	27	12	2009	42	17	9
1993	18	22	12	2010	40	16	11
1994	27	21	17	2011	30	13	3
1995	34	23	24	2012	46	19	8
1996	35	30	10	2013	42	19	5
1997	25	21	9	2014	55	26	11
1998	25	25	8	2015*	32	16	5
1999	26	17	3	2016*	34	18	4
2000	23	16	5	TOTAL	981	578	261

\*2015-2016 reported AIDS deaths are preliminary.

## Figure 2 – Trends in Living HIV Cases, 1985-2016, Reported through 6/30/2017

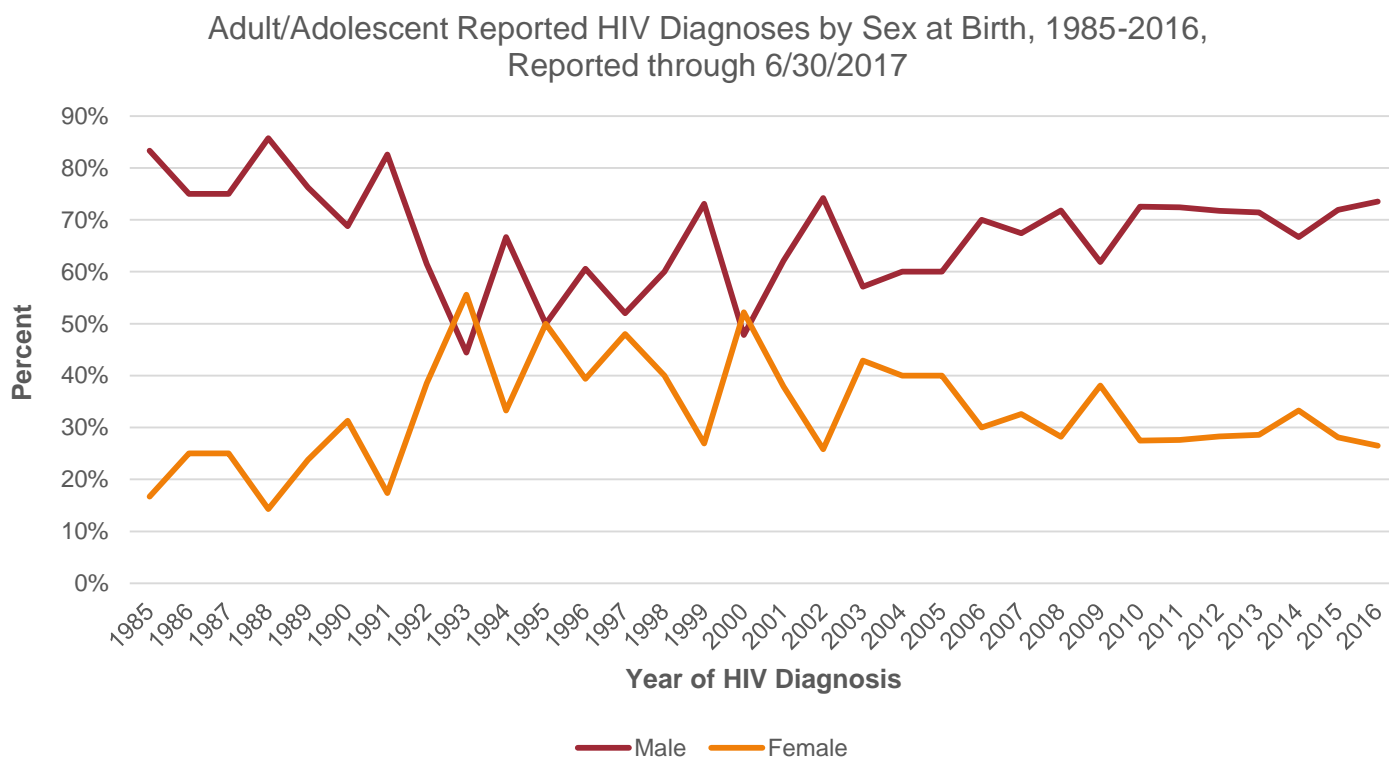
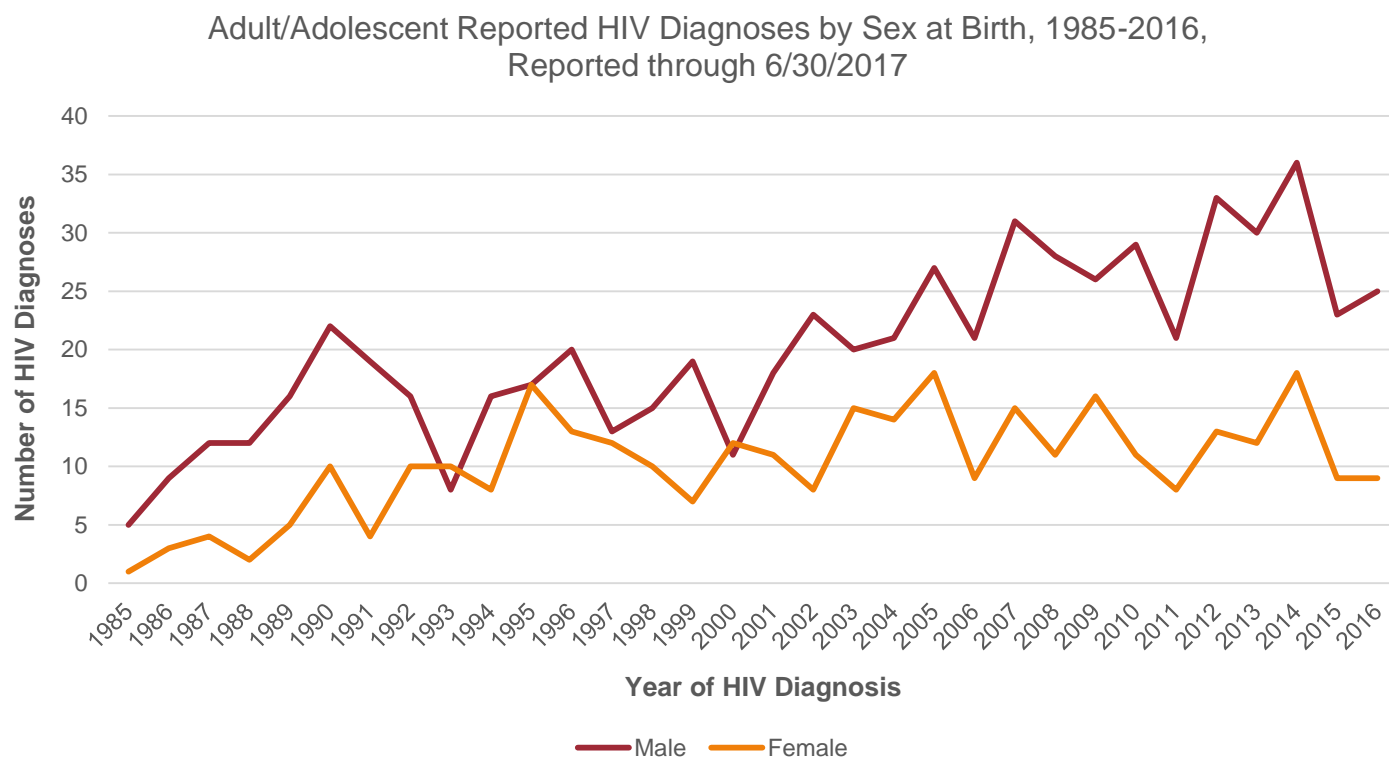
Reported HIV Cases with or without an AIDS Diagnosis and Not Reported to have Died as of December 31<sup>st</sup> of Each Year (Living HIV Cases without AIDS, Living HIV Cases with AIDS, and Total Living HIV Cases) from 1985 through 2016, as Reported through 6/30/2017



YEAR	LIVING HIV CASES WITHOUT AIDS	LIVING HIV CASES WITH AIDS	TOTAL LIVING HIV CASES	YEAR	LIVING HIV CASES WITHOUT AIDS	LIVING HIV CASES WITH AIDS	TOTAL LIVING HIV CASES
1985	6	1	7	2001	105	144	249
1986	13	4	17	2002	118	153	271
1987	23	6	29	2003	125	165	290
1988	29	9	38	2004	138	174	312
1989	36	18	54	2005	162	183	345
1990	56	25	81	2006	159	197	356
1991	68	26	94	2007	184	205	389
1992	69	41	110	2008	195	229	424
1993	65	51	116	2009	215	237	452
1994	66	55	121	2010	237	242	479
1995	74	54	128	2011	254	252	506
1996	75	74	149	2012	274	263	537
1997	79	86	165	2013	297	277	574
1998	81	103	184	2014	324	292	616
1999	90	117	207	2015	339	303	642
2000	96	128	224	2016	359	317	676

### Figure 3 – Trends in Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, 1985-2016, Reported through 6/30/2017

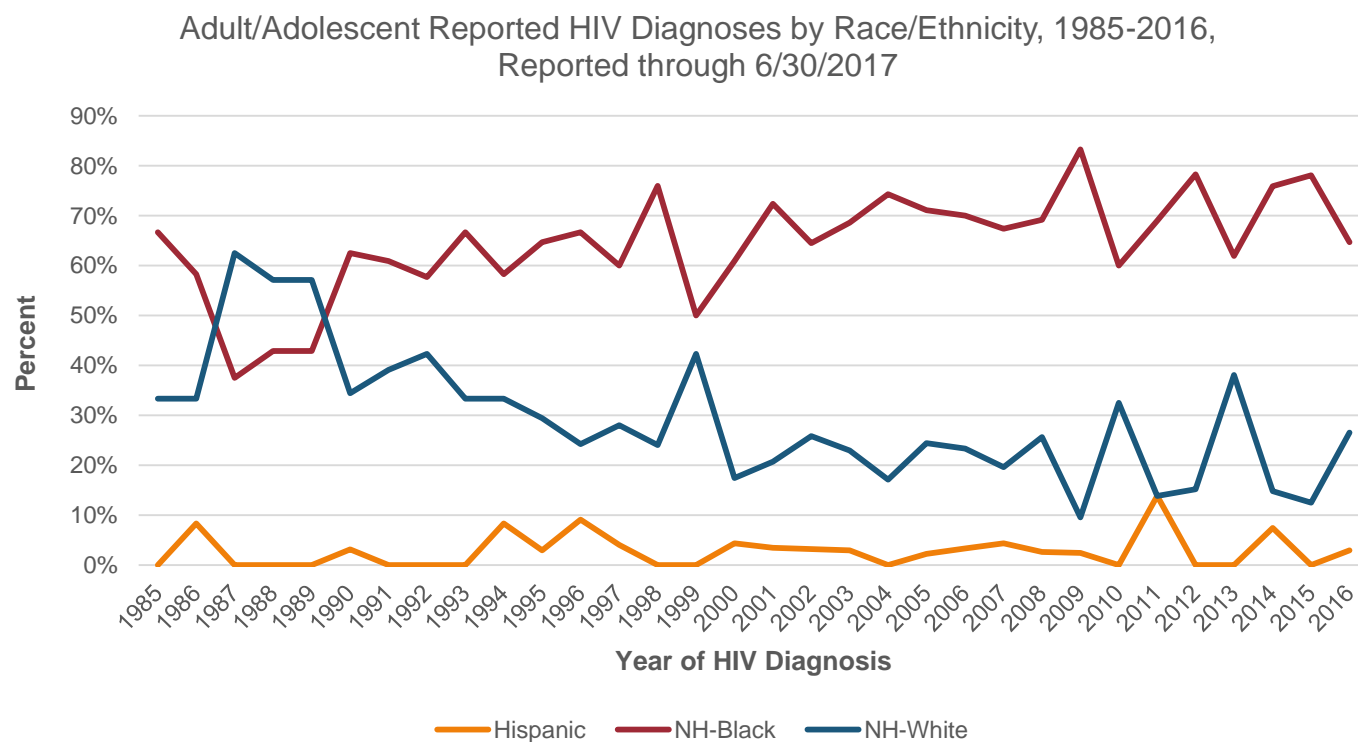
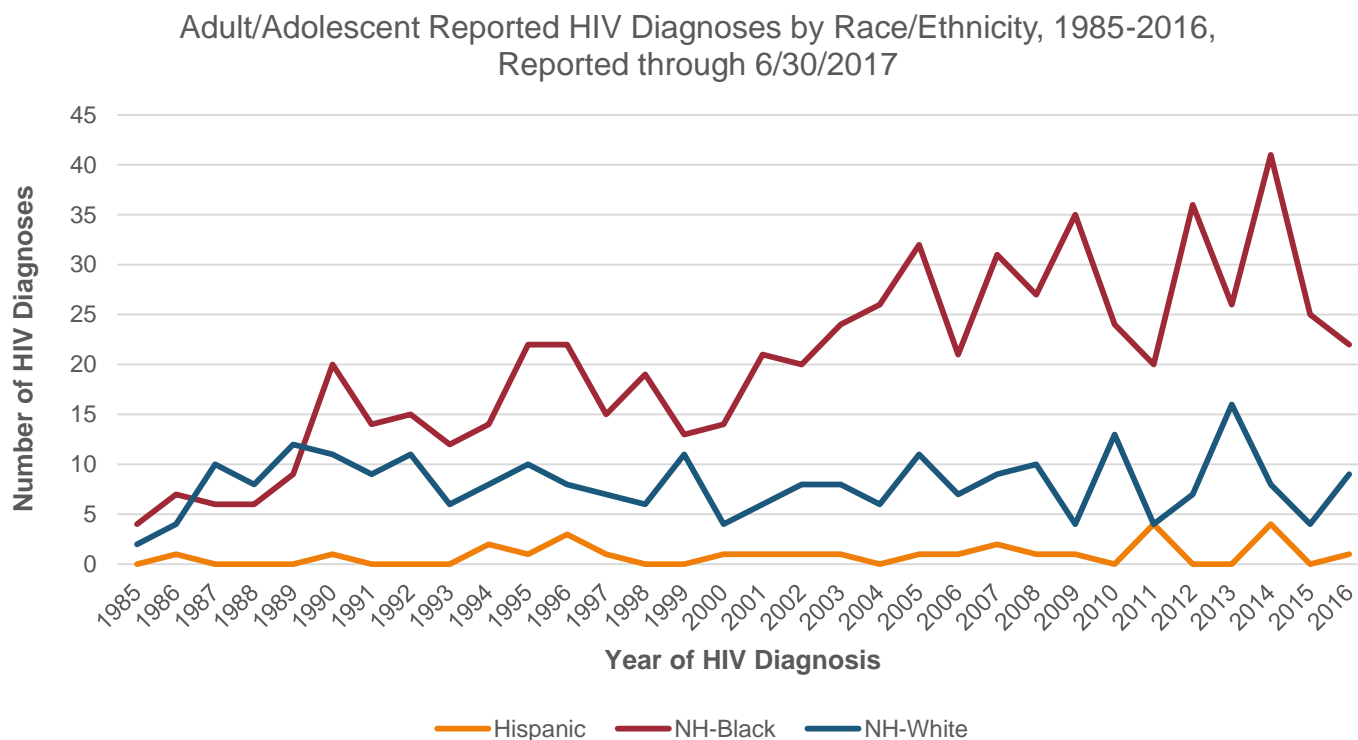
Number and Percent by Sex at Birth of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017



ADULT/ADOLESCENT REPORTED HIV DIAGNOSES					
YEAR OF HIV DIAGNOSIS	No.	SEX AT BIRTH			
		Male		Female	
		No.	%	No.	%
<1985	2	2	100.0%	0	0.0%
1985	6	5	83.3%	1	16.7%
1986	12	9	75.0%	3	25.0%
1987	16	12	75.0%	4	25.0%
1988	14	12	85.7%	2	14.3%
1989	21	16	76.2%	5	23.8%
1990	32	22	68.8%	10	31.3%
1991	23	19	82.6%	4	17.4%
1992	26	16	61.5%	10	38.5%
1993	18	8	44.4%	10	55.6%
1994	24	16	66.7%	8	33.3%
1995	34	17	50.0%	17	50.0%
1996	33	20	60.6%	13	39.4%
1997	25	13	52.0%	12	48.0%
1998	25	15	60.0%	10	40.0%
1999	26	19	73.1%	7	26.9%
2000	23	11	47.8%	12	52.2%
2001	29	18	62.1%	11	37.9%
2002	31	23	74.2%	8	25.8%
2003	35	20	57.1%	15	42.9%
2004	35	21	60.0%	14	40.0%
2005	45	27	60.0%	18	40.0%
2006	30	21	70.0%	9	30.0%
2007	46	31	67.4%	15	32.6%
2008	39	28	71.8%	11	28.2%
2009	42	26	61.9%	16	38.1%
2010	40	29	72.5%	11	27.5%
2011	29	21	72.4%	8	27.6%
2012	46	33	71.7%	13	28.3%
2013	42	30	71.4%	12	28.6%
2014	54	36	66.7%	18	33.3%
2015	32	23	71.9%	9	28.1%
2016	34	25	73.5%	9	26.5%
TOTAL	969	644	66.5%	325	33.5%

## Figure 4 – Trends in Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, 1985-2016, Reported through 6/30/2017

Number and Percent by Race/Ethnicity of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017



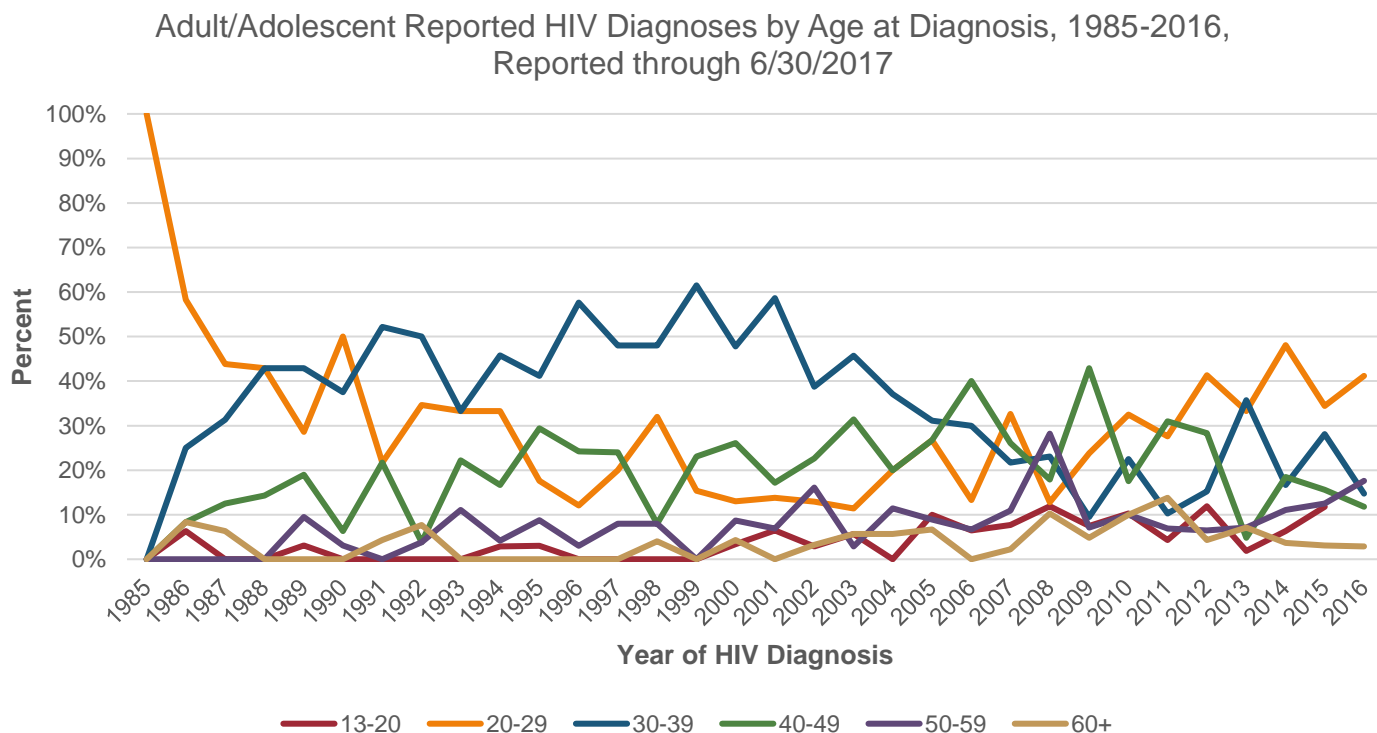
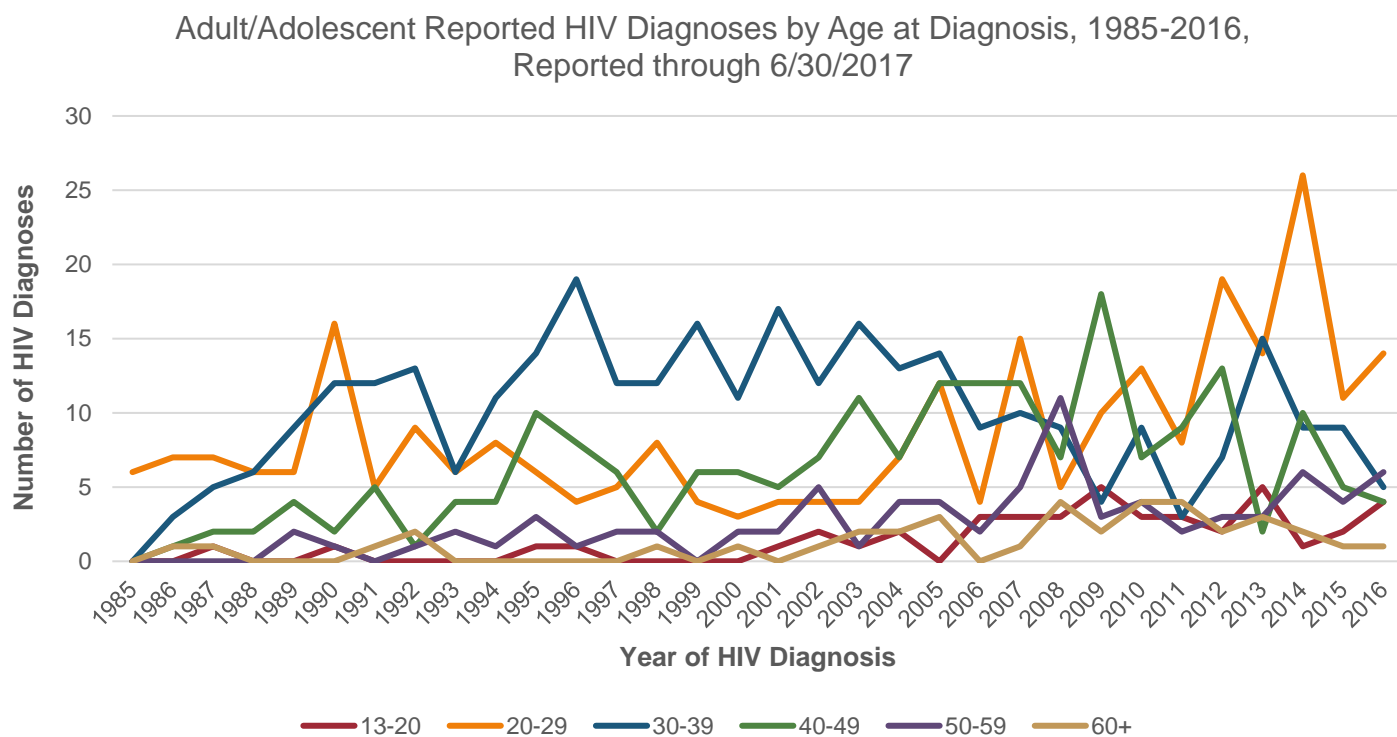
Non-Hispanic Other race not shown

YEAR OF HIV DIAGNOSIS	No.	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES							
		RACE/ETHNICITY							
		Hispanic		Non-Hispanic Black, only		Non-Hispanic White, only		Non-Hispanic Other Race	
		No.	%	No.	%	No.	%	No.	%
<1985	2	0	0.0%	1	50.0%	1	50.0%	0	0.0%
1985	6	0	0.0%	4	66.7%	2	33.3%	0	0.0%
1986	12	1	8.3%	7	58.3%	4	33.3%	0	0.0%
1987	16	0	0.0%	6	37.5%	10	62.5%	0	0.0%
1988	14	0	0.0%	6	42.9%	8	57.1%	0	0.0%
1989	21	0	0.0%	9	42.9%	12	57.1%	0	0.0%
1990	32	1	3.1%	20	62.5%	11	34.4%	0	0.0%
1991	23	0	0.0%	14	60.9%	9	39.1%	0	0.0%
1992	26	0	0.0%	15	57.7%	11	42.3%	0	0.0%
1993	18	0	0.0%	12	66.7%	6	33.3%	0	0.0%
1994	24	2	8.3%	14	58.3%	8	33.3%	0	0.0%
1995	34	1	2.9%	22	64.7%	10	29.4%	1	2.9%
1996	33	3	9.1%	22	66.7%	8	24.2%	0	0.0%
1997	25	1	4.0%	15	60.0%	7	28.0%	2	8.0%
1998	25	0	0.0%	19	76.0%	6	24.0%	0	0.0%
1999	26	0	0.0%	13	50.0%	11	42.3%	2	7.7%
2000	23	1	4.3%	14	60.9%	4	17.4%	4	17.4%
2001	29	1	3.4%	21	72.4%	6	20.7%	1	3.4%
2002	31	1	3.2%	20	64.5%	8	25.8%	2	6.5%
2003	35	1	2.9%	24	68.6%	8	22.9%	2	5.7%
2004	35	0	0.0%	26	74.3%	6	17.1%	3	8.6%
2005	45	1	2.2%	32	71.1%	11	24.4%	1	2.2%
2006	30	1	3.3%	21	70.0%	7	23.3%	1	3.3%
2007	46	2	4.3%	31	67.4%	9	19.6%	4	8.7%
2008	39	1	2.6%	27	69.2%	10	25.6%	1	2.6%
2009	42	1	2.4%	35	83.3%	4	9.5%	2	4.8%
2010	40	0	0.0%	24	60.0%	13	32.5%	3	7.5%
2011	29	4	13.8%	20	69.0%	4	13.8%	1	3.4%
2012	46	0	0.0%	36	78.3%	7	15.2%	3	6.5%
2013	42	0	0.0%	26	61.9%	16	38.1%	0	0.0%
2014	54	4	7.4%	41	75.9%	8	14.8%	1	1.9%
2015	32	0	0.0%	25	78.1%	4	12.5%	3	9.4%
2016	34	1	2.9%	22	64.7%	9	26.5%	2	5.9%
TOTAL	969	28	2.9%	644	66.5%	258	26.6%	39	4.0%



## Figure 5 – Trends in Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, 1985-2016, Reported through 6/30/2017

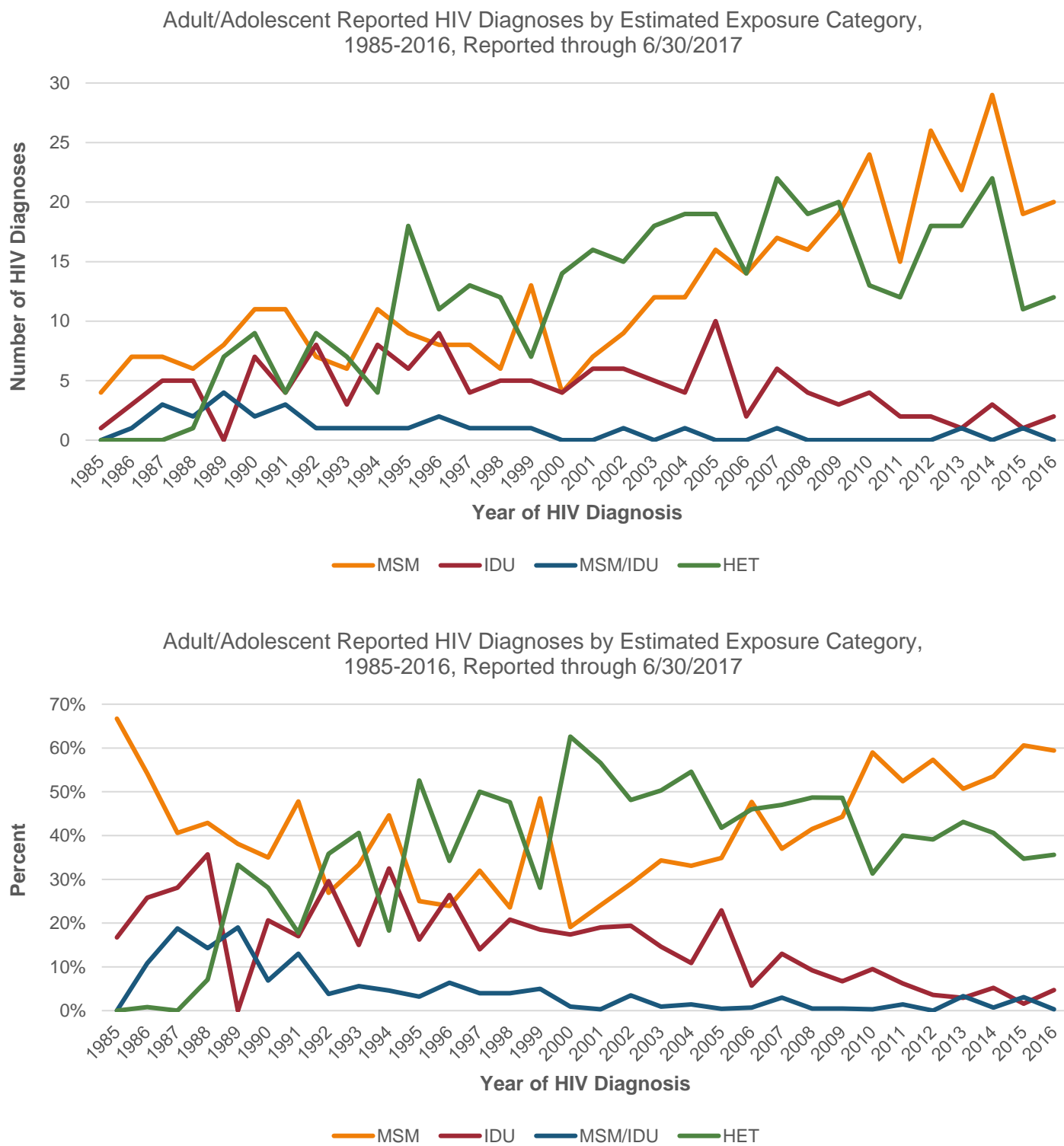
Number and Percent by Age at HIV Diagnosis of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017



REPORTED ADULT/ADOLESCENT HIV DIAGNOSES													
YEAR OF HIV DIAGNOSIS	No.	AGE AT HIV DIAGNOSIS											
		Age 13-19		Age 20-29		Age 30-39		Age 40-49		Age 50-59		Age 60+	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<1985	2	1	50.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
1985	6	0	0.0%	6	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
1986	12	0	0.0%	7	58.3%	3	25.0%	1	8.3%	0	0.0%	1	8.3%
1987	16	1	6.3%	7	43.8%	5	31.3%	2	12.5%	0	0.0%	1	6.3%
1988	14	0	0.0%	6	42.9%	6	42.9%	2	14.3%	0	0.0%	0	0.0%
1989	21	0	0.0%	6	28.6%	9	42.9%	4	19.0%	2	9.5%	0	0.0%
1990	32	1	3.1%	16	50.0%	12	37.5%	2	6.3%	1	3.1%	0	0.0%
1991	23	0	0.0%	5	21.7%	12	52.2%	5	21.7%	0	0.0%	1	4.3%
1992	26	0	0.0%	9	34.6%	13	50.0%	1	3.8%	1	3.8%	2	7.7%
1993	18	0	0.0%	6	33.3%	6	33.3%	4	22.2%	2	11.1%	0	0.0%
1994	24	0	0.0%	8	33.3%	11	45.8%	4	16.7%	1	4.2%	0	0.0%
1995	34	1	2.9%	6	17.6%	14	41.2%	10	29.4%	3	8.8%	0	0.0%
1996	33	1	3.0%	4	12.1%	19	57.6%	8	24.2%	1	3.0%	0	0.0%
1997	25	0	0.0%	5	20.0%	12	48.0%	6	24.0%	2	8.0%	0	0.0%
1998	25	0	0.0%	8	32.0%	12	48.0%	2	8.0%	2	8.0%	1	4.0%
1999	26	0	0.0%	4	15.4%	16	61.5%	6	23.1%	0	0.0%	0	0.0%
2000	23	0	0.0%	3	13.0%	11	47.8%	6	26.1%	2	8.7%	1	4.3%
2001	29	1	3.4%	4	13.8%	17	58.6%	5	17.2%	2	6.9%	0	0.0%
2002	31	2	6.5%	4	12.9%	12	38.7%	7	22.6%	5	16.1%	1	3.2%
2003	35	1	2.9%	4	11.4%	16	45.7%	11	31.4%	1	2.9%	2	5.7%
2004	35	2	5.7%	7	20.0%	13	37.1%	7	20.0%	4	11.4%	2	5.7%
2005	45	0	0.0%	12	26.7%	14	31.1%	12	26.7%	4	8.9%	3	6.7%
2006	30	3	10.0%	4	13.3%	9	30.0%	12	40.0%	2	6.7%	0	0.0%
2007	46	3	6.5%	15	32.6%	10	21.7%	12	26.1%	5	10.9%	1	2.2%
2008	39	3	7.7%	5	12.8%	9	23.1%	7	17.9%	11	28.2%	4	10.3%
2009	42	5	11.9%	10	23.8%	4	9.5%	18	42.9%	3	7.1%	2	4.8%
2010	40	3	7.5%	13	32.5%	9	22.5%	7	17.5%	4	10.0%	4	10.0%
2011	29	3	10.3%	8	27.6%	3	10.3%	9	31.0%	2	6.9%	4	13.8%
2012	46	2	4.3%	19	41.3%	7	15.2%	13	28.3%	3	6.5%	2	4.3%
2013	42	5	11.9%	14	33.3%	15	35.7%	2	4.8%	3	7.1%	3	7.1%
2014	54	1	1.9%	26	48.1%	9	16.7%	10	18.5%	6	11.1%	2	3.7%
2015	32	2	6.3%	11	34.4%	9	28.1%	5	15.6%	4	12.5%	1	3.1%
2016	34	4	11.8%	14	41.2%	5	14.7%	4	11.8%	6	17.6%	1	2.9%
TOTAL	969	45	4.6%	276	28.5%	322	33.2%	205	21.2%	82	8.5%	39	4.0%

## Figure 6 – Trends in Adult/Adolescent Reported HIV Diagnoses by Estimated Exposure Category, 1985-2016, Reported through 6/30/2017

Number and Percent by Estimated Exposure Category<sup>§</sup> of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017



Other Exposure Category not shown

<sup>§</sup> Multiple imputation was used to estimate and adjust for missing transmission category.

YEAR OF HIV DIAGNOSIS	No.**	% with No Reported Exposure*	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES									
			ESTIMATED EXPOSURE CATEGORY§									
			MSM		IDU		MSM/IDU		HET		Other Exposure	
			No.	%	No.	%	No.	%	No.	%	No.	%
<1985	2	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
1985	6	16.7%	4	66.7%	1	16.7%	0	0.0%	0	0.0%	1	16.7%
1986	12	8.3%	7	54.2%	3	25.8%	1	10.8%	0	0.8%	1	8.3%
1987	16	12.5%	7	40.6%	5	28.1%	3	18.8%	0	0.0%	2	12.5%
1988	14	0.0%	6	42.9%	5	35.7%	2	14.3%	1	7.1%	0	0.0%
1989	21	0.0%	8	38.1%	0	0.0%	4	19.0%	7	33.3%	2	9.5%
1990	32	6.3%	11	35.0%	7	20.6%	2	6.9%	9	28.1%	3	9.4%
1991	23	8.7%	11	47.8%	4	17.0%	3	13.0%	4	17.8%	1	4.3%
1992	26	3.8%	7	26.9%	8	29.6%	1	3.8%	9	35.8%	1	3.8%
1993	18	5.6%	6	33.3%	3	15.0%	1	5.6%	7	40.6%	1	5.6%
1994	24	8.3%	11	44.6%	8	32.5%	1	4.6%	4	18.3%	0	0.0%
1995	34	8.8%	9	25.0%	6	16.2%	1	3.2%	18	52.6%	1	2.9%
1996	33	18.2%	8	23.9%	9	26.4%	2	6.4%	11	34.2%	3	9.1%
1997	25	4.0%	8	32.0%	4	14.0%	1	4.0%	13	50.0%	0	0.0%
1998	25	20.0%	6	23.6%	5	20.8%	1	4.0%	12	47.6%	1	4.0%
1999	26	19.2%	13	48.5%	5	18.5%	1	5.0%	7	28.1%	0	0.0%
2000	23	17.4%	4	19.1%	4	17.4%	0	0.9%	14	62.6%	0	0.0%
2001	29	24.1%	7	24.1%	6	19.0%	0	0.3%	16	56.6%	0	0.0%
2002	31	12.9%	9	29.0%	6	19.4%	1	3.5%	15	48.1%	0	0.0%
2003	35	31.4%	12	34.3%	5	14.6%	0	0.9%	18	50.3%	0	0.0%
2004	35	25.7%	12	33.1%	4	10.9%	1	1.4%	19	54.6%	0	0.0%
2005	45	28.9%	16	34.9%	10	22.9%	0	0.4%	19	41.8%	0	0.0%
2006	30	23.3%	14	47.7%	2	5.7%	0	0.7%	14	46.0%	0	0.0%
2007	46	39.1%	17	37.0%	6	13.0%	1	3.0%	22	47.0%	0	0.0%
2008	39	33.3%	16	41.5%	4	9.2%	0	0.5%	19	48.7%	0	0.0%
2009	42	64.3%	19	44.3%	3	6.7%	0	0.5%	20	48.6%	0	0.0%
2010	40	65.0%	24	59.0%	4	9.5%	0	0.3%	13	31.3%	0	0.0%
2011	29	51.7%	15	52.4%	2	6.2%	0	1.4%	12	40.0%	0	0.0%
2012	46	28.3%	26	57.3%	2	3.6%	0	0.0%	18	39.1%	0	0.0%
2013	42	35.7%	21	50.7%	1	2.9%	1	3.3%	18	43.1%	0	0.0%
2014	54	22.2%	29	53.5%	3	5.2%	0	0.7%	22	40.6%	0	0.0%
2015	32	15.6%	19	60.6%	1	1.6%	1	3.1%	11	34.7%	0	0.0%
2016	34	35.3%	20	59.4%	2	4.7%	0	0.3%	12	35.6%	0	0.0%
TOTAL	969	25.1%	402	41.5%	132	13.6%	33	3.4%	384	39.7%	17	1.8%

§ Multiple imputation was used to estimate and adjust for missing transmission category.

\*Percent with no reported exposure prior to multiple imputation adjustment.

\*\* Discrepancies in the table between total HIV diagnoses and the sums by exposure category are due to less than 1% of cases missing transmission category after multiple imputation.

## Section III – Adult/Adolescent Cases by Jurisdiction

**Table 1 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Jurisdiction of Residence at HIV Diagnosis, Reported through 6/30/2017**

JURISDICTION OF RESIDENCE AT HIV DIAGNOSIS	POPULATION AGE 13+	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES							
		No.	% of Total	Rate	Linked to Care		Late HIV Diagnoses	First CD4 Test Result	
					% 1 mo.	% 3 mo.	%	%	Median Count
Calvert	76,619	8	23.5%	10.4	***	***	***	***	***
Charles	131,050	22	64.7%	16.8	81.8%	90.9%	27.3%	95.5%	325
Saint Mary's	92,866	4	11.8%	4.3	***	***	***	***	***
<b>TOTAL</b>	300,535	34	100.0%	11.3	70.6%	82.4%	20.6%	85.3%	382

\*\*\* Data withheld due to low population counts and/or case counts

**Jurisdiction of Residence at HIV Diagnosis:** Jurisdiction of residence at time of initial HIV diagnosis.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Rate:** Number of adult/adolescent HIV diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Table 2 – Adult/Adolescent AIDS Diagnoses during 2016, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction of Residence at AIDS Diagnosis, Reported through 6/30/2017**

JURISDICTION OF RESIDENCE AT AIDS DIAGNOSIS	POPULATION AGE 13+	ADULT/ADOLESCENT REPORTED AIDS DIAGNOSES				
		No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis
Calvert	76,619	2	11.1%	2.6	***	***
Charles	131,050	12	66.7%	9.2	2.2	66.7%
Saint Mary's	92,866	4	22.2%	4.3	***	***
<b>TOTAL</b>	300,535	18	100.0%	6.0	4.2	55.6%

\*\*\* Data withheld due to low population counts and/or case counts

**Jurisdiction of Residence at AIDS Diagnosis:** Jurisdiction of residence at time of initial AIDS diagnosis.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

**Rate:** Number of adult/adolescent AIDS diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Mean Years from HIV Diagnosis:** Mean number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Percent Late HIV Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

**Table 3 – Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Residence at Diagnosis, Reported through 6/30/2017**

JURISDICTION OF RESIDENCE AT DIAGNOSIS	POPULATION AGE 13+	ADULT/ADOLESCENT LIVING HIV CASES WITHOUT AIDS			ADULT/ADOLESCENT LIVING HIV CASES WITH AIDS			ADULT/ADOLESCENT TOTAL LIVING HIV CASES			
		No.	% of Total	Rate	No.	% of Total	Rate	No.	% of Total	Rate	Ratio (1 in X)
Calvert	76,619	55	15.4%	71.8	53	16.9%	69.2	108	16.1%	141.0	709
Charles	131,050	234	65.7%	178.6	191	61.0%	145.7	425	63.5%	324.3	308
Saint Mary's	92,866	67	18.8%	72.1	69	22.0%	74.3	136	20.3%	146.4	682
<b>TOTAL</b>	<b>300,535</b>	<b>356</b>	<b>100.0%</b>	<b>118.5</b>	<b>313</b>	<b>100.0%</b>	<b>104.1</b>	<b>669</b>	<b>100.0%</b>	<b>222.6</b>	<b>449</b>

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or time of initial AIDS diagnosis.

**Population Age 13+:** Population greater than or equal to 13 years old, estimate for 7/1/2016.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Rate:** Number of adult/adolescent cases divided by the population age 13 years or older multiplied by 100,000.

**Ratio (1 in X):** Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

**Table 4 – Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Residence at Diagnosis or Current Residence, Reported through 6/30/2017**

Jurisdiction of Residence	Population Age 13+	Adult/Adolescent Total Living HIV Cases								
		Residence at Diagnosis				Current Residence				% Change
		No.	% of Total	Rate	Ratio (1 in X)	No.	% of Total	Rate	Ratio (1 in X)	
Calvert	76,619	108	16.1%	141.0	709	130	16.7%	169.7	589	20.4%
Charles	131,050	425	63.5%	324.3	308	491	63.0%	374.7	266	15.5%
Saint Mary's	92,866	136	20.3%	146.4	682	158	20.3%	170.1	587	16.2%
TOTAL	300,535	669	100.0%	222.6	449	779	100.0%	259.2	385	16.4%

**Jurisdiction of Residence:** Jurisdiction of residence at diagnosis or current residence.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

**Current Residence:** Jurisdiction of residence from the most recent report since 1/1/2009.

**Rate:** Number of adult/adolescent cases divided by the population age 13 years or older multiplied by 100,000.

**Ratio (1 in X):** Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

**Percent Change:** The percent change in number of adult/adolescent total living HIV cases from residence at diagnosis to current residence.



**Table 5 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Current Residence, Reported through 6/30/2017**

JURISDICTION OF CURRENT RESIDENCE	ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
	No.	Recent CD4 Test Result						
		No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Calvert	130	101	77.7%	686	8.9%	8.9%	14.9%	67.3%
Charles	491	344	70.1%	584	12.5%	13.7%	16.3%	57.6%
Saint Mary's	158	113	71.5%	509	10.6%	20.4%	17.7%	51.3%
<b>TOTAL</b>	<b>779</b>	<b>558</b>	<b>71.6%</b>	<b>584</b>	<b>11.5%</b>	<b>14.2%</b>	<b>16.3%</b>	<b>58.1%</b>

**Jurisdiction of Current Residence:** Jurisdiction of residence from the most recent report since 1/1/2009.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year.

**With Test:** Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

**Table 6 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Current Residence, Reported through 6/30/2017**

JURISDICTION OF RESIDENCE	ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
	No.	Recent Viral Load Test Result			
		No. with Test	% with Test	% Suppressed	Median Unsuppressed
Calvert	130	104	80.0%	88.5%	12,646
Charles	491	357	72.7%	78.2%	11,154
Saint Mary's	158	109	69.0%	82.6%	26,400
<b>TOTAL</b>	<b>779</b>	<b>570</b>	<b>73.2%</b>	<b>80.9%</b>	<b>11,607</b>

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Jurisdiction of Current Residence:** Jurisdiction of residence from the most recent report since 1/1/2009.

**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year.

**With Test:** Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

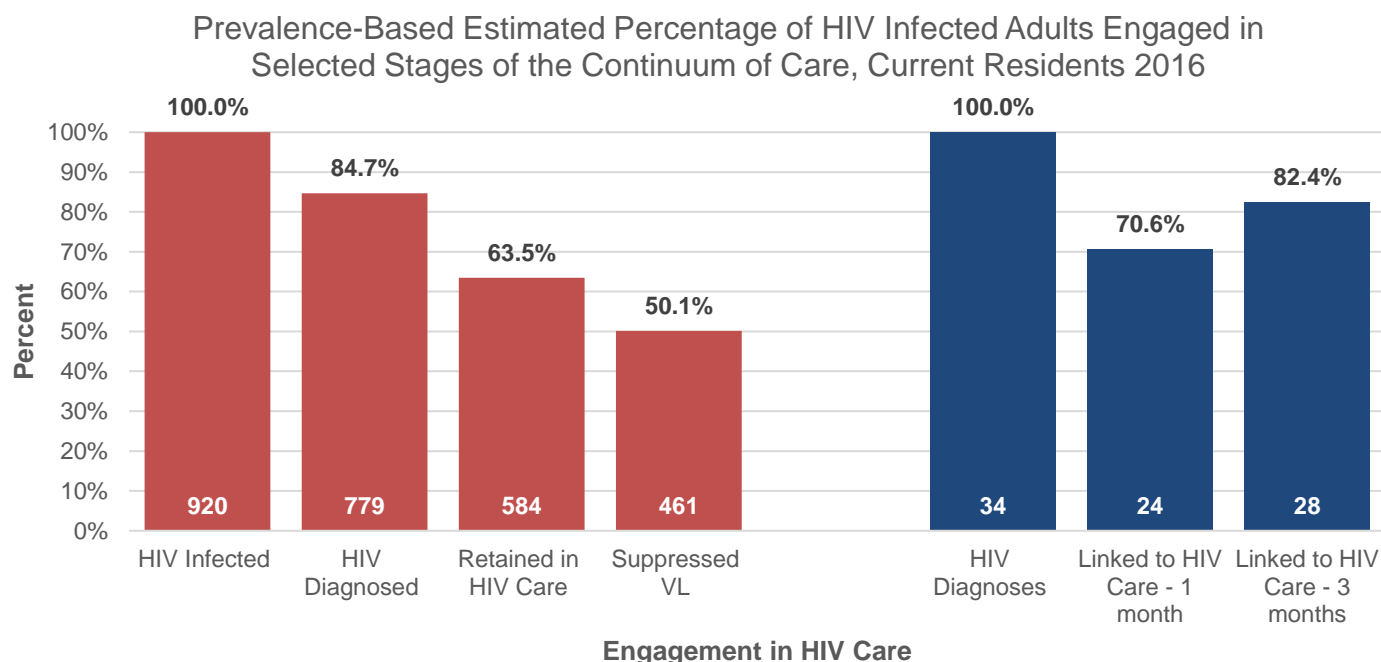


## Section IV – Continuum of Care Cascades

In their 2011 article in *Clinical Infectious Diseases*, Gardner et al.<sup>1</sup> utilize a continuum of care “cascade” to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

### Figure 7 – Prevalence-Based Estimated Adult/Adolescent 2016 HIV Continuum of Care Cascades, Current Southern Region Residents, Reported through 6/30/2017

The prevalence-based Southern Region Engagement in HIV Care Cascade (below) uses the most recent Centers for Disease Control and Prevention (CDC) estimate of the number of undiagnosed persons in Maryland (15.3%)<sup>2</sup> to generate an estimated number of HIV infected persons currently residing in the Southern Region. It then uses Maryland surveillance data to describe the number and percentage of persons living with HIV in the region on 12/31/2016 and the number and percentage of new HIV diagnoses in 2016 who belong to each of the stages of engagement in HIV care.



Continuum of Care Stage	Living HIV Cases		Continuum of Care Stage	New Diagnoses	
	Number	Percentage		Number	Percentage
HIV Infected	920	100.0%	New HIV Diagnoses	34	100.0%
HIV Diagnosed	779	84.7%	Linked to HIV Care – 1 Month	24	70.6%
Retained in HIV Care	584	63.5%	Linked to HIV Care – 3 Months	28	82.4%
Suppressed VL	461	50.1%			

**HIV Infected:** HIV Diagnosed divided by one minus the estimate of undiagnosed HIV infections (15.3%) in Maryland.

**HIV Diagnosed:** Adult/adolescent total living HIV cases as of December 31<sup>st</sup> of the specified year.

**Retained in HIV Care:** HIV Diagnosed with a reported CD4 or viral load test result performed during the specified year.

**Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**New HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Linked to HIV Care – 1 month:** Adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month after their initial HIV diagnosis.

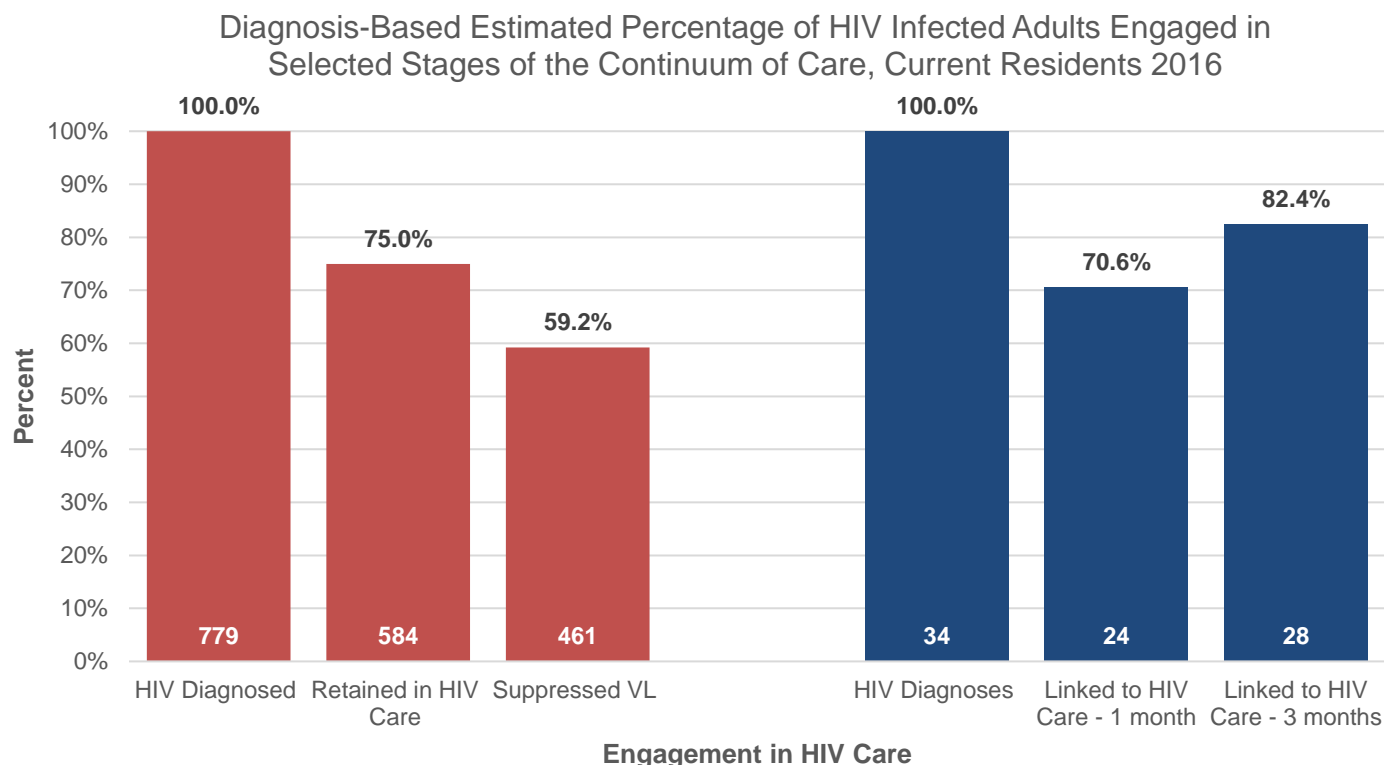
**Linked to HIV Care – 3 months:** Number of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

<sup>1</sup> Gardner et al, “The Spectrum of Engagement in HIV Care and its Relevance to Test-and-Treat Strategies for Prevention of HIV Infection.” *Clin Infect Dis*. 2011; 52 (6): 793-800.

<sup>2</sup>Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2015. *HIV Surveillance Supplemental Report* 2017;22(No. 2). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published July 2017.

## Figure 8 – Diagnosis-Based Estimated Adult/Adolescent 2016 HIV Continuum of Care Cascades, Current Southern Region Residents, Reported through 6/30/2017

The diagnosis-based Southern Region Engagement in HIV Care Cascade (below) uses Maryland surveillance data for current Southern Region residents to describe the number and percentage of persons living with HIV in the Southern Region on 12/31/2016 and the number and percentage of new HIV diagnoses in 2016 who belong to each of the stages of engagement in HIV care.



Continuum of Care Stage	Living HIV Cases		Continuum of Care Stage	New Diagnoses	
	Number	Percentage		Number	Percentage
HIV Diagnosed	779	100.0%	New HIV Diagnoses	34	100.0%
Retained in HIV Care	584	75.0%	Linked to HIV Care – 1 Month	24	70.6%
Suppressed VL	461	59.2%	Linked to HIV Care – 3 Months	28	82.4%

**HIV Diagnosed:** Adult/adolescent total living HIV cases as of December 31<sup>st</sup> of the specified year with a recent address in Maryland between 2009 and 2016.

**Retained in HIV Care:** HIV Diagnosed with a reported CD4 or viral load test result performed during the specified year.

**Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**New HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Linked to HIV Care – 1 month:** Adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month after their initial HIV diagnosis.

**Linked to HIV Care – 3 months:** Number of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

## Section V – Cases by Age

**Table 7 – HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Age at HIV Diagnosis, Reported through 6/30/2017**

AGE AT HIV DIAGNOSIS	POPULATION	REPORTED HIV DIAGNOSES										
		No.	% of Total	Rate	Linked to Care			Late HIV Diagnoses		First CD4 Test Result		
					No.	% 1 mo.	% 3 mo.	No.	%	No.	%	Median Count
<5 (Pediatric)	21,778	0	0.0%	0.0	--	--	--	--	--	--	--	--
5-12 (Pediatric)	39,230	0	0.0%	0.0	--	--	--	--	--	--	--	--
13-19	35,638	4	11.8%	11.2	***	***	***	***	***	***	***	***
20-29	46,755	14	41.2%	29.9	10	57.1%	71.4%	***	***	12	85.7%	395
30-39	45,339	5	14.7%	11.0	5	100.0%	100.0%	***	***	5	100.0%	31
40-49	50,034	4	11.8%	8.0	***	***	***	***	***	***	***	***
50-59	56,858	6	17.6%	10.6	***	***	***	***	***	***	***	***
60+	65,911	1	2.9%	1.5	***	***	***	***	***	***	***	***
<b>TOTAL</b>	<b>361,543</b>	<b>34</b>	<b>100.0%</b>	<b>9.4</b>	<b>28</b>	<b>70.6%</b>	<b>82.4%</b>	<b>7</b>	<b>20.6%</b>	<b>29</b>	<b>85.3%</b>	<b>382</b>

\*\*\* Data withheld due to low population counts and/or case counts

**Age at HIV Diagnosis:** Age group at time of initial HIV diagnosis.

**Population:** Population estimate for 7/1/2016.

**Reported HIV Diagnoses:** Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

**Rate:** Number of HIV diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Linked to Care:** Percent of reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Table 8 – HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017**

AGE ON 12/31/2016	POPULATION	TOTAL LIVING HIV CASES				
		No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)
<5	21,778	1	0.1%	0.0%	4.6	21,778
5-12	39,230	2	0.3%	0.0%	5.1	19,614
13-19	35,638	5	0.6%	20.0%	14.0	7,127
20-29	46,755	107	13.6%	27.1%	228.9	436
30-39	45,339	154	19.6%	35.1%	339.7	294
40-49	50,034	191	24.3%	58.6%	381.7	261
50-59	56,858	237	30.1%	63.7%	416.8	239
60+	65,911	90	11.4%	70.0%	136.5	732
<b>TOTAL</b>	<b>361,543</b>	<b>787</b>	<b>100.0%</b>	<b>52.1%</b>	<b>217.7</b>	<b>459</b>

**Age on [date]:** Age group of living cases on the specified date.

**Population:** Population estimate for 7/1/2016.

**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Percent Living with AIDS:** The percent of reported HIV diagnoses with an AIDS diagnosis not reported to have died as of December 31<sup>st</sup> of the specified year.

**Rate:** Number of HIV cases divided by the population multiplied by 100,000.

**Ratio (1 in X):** Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

**Table 9 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017**

AGE ON 12/31/2016	ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
	No.	Recent CD4 Test Results						
		No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
13-19	4	***	***	***	***	***	***	***
20-29	104	69	66.3%	628	8.7%	8.7%	15.9%	66.7%
30-39	153	107	69.9%	604	10.3%	12.1%	13.1%	64.5%
40-49	191	133	69.6%	547	16.5%	15.0%	15.8%	52.6%
50-59	237	178	75.1%	611	10.1%	14.0%	14.0%	61.8%
60+	90	***	***	***	***	***	***	***
<b>TOTAL</b>	<b>779</b>	<b>558</b>	<b>71.6%</b>	<b>584</b>	<b>11.5%</b>	<b>14.2%</b>	<b>16.3%</b>	<b>58.1%</b>

\*\*\* Data withheld due to low population counts and/or case counts

**Table 10 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017**

AGE ON 12/31/2016	ADULT/ADOLESCENT TOTAL LIVING HIV CASES					
	No.	Recent Viral Load Test Result				Median Unsuppressed
		No. with Test	% with Test	% Suppressed		
13-19	4	***	***	***		***
20-29	104	72	69.2%	76.4%		12,530
30-39	153	113	73.9%	77.9%		11,607
40-49	191	138	72.3%	79.7%		11,585
50-59	237	177	74.7%	83.1%		4,900
60+	90	***	***	***		***
<b>TOTAL</b>	<b>779</b>	<b>570</b>	<b>73.2%</b>	<b>80.9%</b>		<b>11,607</b>

\*\*\* Data withheld due to low population counts and/or case counts

**Age on [date]:** Age group of living cases on the specified date.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year.

**CD4 With Test:** Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year.

**Viral Load With Test:** Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

## Section VI – Adult/Adolescent Cases by Demographics

**Table 11 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Sex at Birth, Race/Ethnicity, and Country of Birth, Reported through 6/30/2017**

SEX AT BIRTH	POPULATION AGE 13+*	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES							
		No.	% of Total	Rate	Linked to Care		Late HIV Diagnoses	First CD4 Test Result	
					% 1 mo.	% 3 mo.		%	Median Count
Male	146,156	25	73.5%	17.1	80.0%	88.0%	***	88.0%	379
Female	154,380	9	26.5%	5.8	44.4%	66.7%	***	77.8%	488
TOTAL	300,535	34	100.0%	11.3	70.6%	82.4%	20.6%	85.3%	382

RACE/ETHNICITY	POPULATION AGE 13+*	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES							
		No.	% of Total	Rate	Linked to Care		Late HIV Diagnoses	First CD4 Test Result	
					% 1 mo.	% 3 mo.		%	Median Count
Hispanic	13,285	1	2.9%	7.5	***	***	***	***	***
Non-Hispanic	287,250	33	97.1%	11.5	69.7%	81.8%	21.2%	84.8%	379
American Indian/Alaska Native, only	1,404	0	0.0%	0.0	--	--	--	--	--
Asian, only	8,263	1	2.9%	12.1	***	***	***	***	***
Black, only	81,576	22	64.7%	27.0	68.2%	81.8%	***	81.8%	367
Native Hawaiian/Other Pacific Islander, only	233	0	0.0%	0.0	--	--	--	--	--
White, only	188,776	9	26.5%	4.8	66.7%	77.8%	***	88.9%	435
Multiracial/Other	6,998	1	2.9%	14.3	***	***	***	***	***
TOTAL	300,535	34	100.0%	11.3	70.6%	82.4%	20.6%	85.3%	382

COUNTRY OF BIRTH	POPULATION AGE 13+*	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES							
		No.	% of Total	Rate	Linked to Care		Late HIV Diagnoses	First CD4 Test Result	
					% 1 mo.	% 3 mo.		%	Median Count
United States	274,574	32	94.1%	11.7	68.8%	81.3%	***	84.4%	408
Foreign-born	15,386	2	5.9%	13.0	***	***	***	***	***
Africa	--	1	2.9%	--	***	***	***	***	***
Asia	--	1	2.9%	--	***	***	***	***	***
Caribbean	--	0	0.0%	--	--	--	--	--	--
Central America	--	0	0.0%	--	--	--	--	--	--
Other	--	0	0.0%	--	--	--	--	--	--
Unknown	--	0	0.0%	--	--	--	--	--	--
TOTAL	289,960	34	100.0%	11.7	70.6%	82.4%	20.6%	85.3%	382

\* Population data by sex at birth, age, and race/ethnicity are from the 2016 U.S. Census population estimates

\*\* Population data by country of birth are from the 2015 American Community Survey

\*\*\* Data withheld due to low population and/or case counts

**Population Age 13+:** Population greater than or equal to 13 years old, estimate for 7/1/2016.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Rate:** Number of adult/adolescent HIV diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.



**Table 12 – Adult/Adolescent Living HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity, and Country of Birth, Reported through 6/30/2017**

SEX AT BIRTH	POPULATION AGE 13+	ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
		No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)
Male	146,156	516	66.2%	53.3%	353.0	283
Female	154,380	263	33.8%	49.8%	170.4	586
TOTAL	300,535	779	100.0%	52.1%	259.2	385

RACE/ETHNICITY	POPULATION AGE 13+*	ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
		No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)
Hispanic	13,285	28	3.6%	57.1%	210.8	474
Non-Hispanic	287,250	751	96.4%	51.9%	261.4	382
American Indian/Alaska Native, only	1,404	0	--	--	--	--
Asian, only	8,263	4	0.5%	50.0%	48.4	2,065
Black, only	81,576	542	69.6%	51.8%	664.4	150
Native Hawaiian/ Other Pacific Islander, only	233	0	--	--	--	--
White, only	188,776	168	21.6%	48.8%	89.0	1,123
Multiracial/ Other	6,998	37	4.7%	67.6%	528.7	189
TOTAL	300,535	779	100.0%	52.1%	259.2	385

COUNTRY OF BIRTH	POPULATION AGE 13+**	ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
		No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)
United States	274,574	731	93.8%	52.9%	266.2	375
Foreign-born	15,386	25	3.2%	56.0%	162.5	615
Africa	--	12	1.5%	58.3%	--	--
Asia	--	4	0.5%	25.0%	--	--
Caribbean	--	2	0.3%	50.0%	--	--
Central America	--	4	0.5%	100.0%	--	--
Other	--	3	0.4%	33.3%	--	--
Unknown	--	23	3.0%	21.7%	--	--
TOTAL	289,960	779	100.0%	52.1%	268.7	372

\* Population data by sex at birth, age, and race/ethnicity are from the 2016 U.S. Census population estimates

\*\* Population data by country of birth are from the 2015 American Community Survey

**Population Age 13+:** Population greater than or equal to 13 years old, estimate for 7/1/2016.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Percent Living with AIDS:** The percent of reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Rate:** Number of adult/adolescent cases divided by the population age 13 years or older multiplied by 100,000.

**Ratio (1 in X):** Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

**Table 13 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2017**

SEX AT BIRTH	ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
	No.	Recent CD4 Test Result						
		No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Male	516	356	69.0%	557	11.8%	15.2%	17.4%	55.6%
Female	263	202	76.8%	654	10.9%	12.4%	14.4%	62.4%
TOTAL	779	558	71.6%	584	11.5%	14.2%	16.3%	58.1%

RACE/ETHNICITY	ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
	No.	Recent CD4 Test Result						
		No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Hispanic	28	14	50.0%	657	7.1%	21.4%	21.4%	50.0%
Non-Hispanic	751	544	72.4%	584	11.6%	14.0%	16.2%	58.3%
American Indian/Alaska Native, only	0	--	--	--	--	--	--	--
Asian, only	4	***	***	***	***	***	***	***
Black, only	542	390	72.0%	578	13.3%	13.6%	15.9%	57.2%
Native Hawaiian/Other Pacific Islander, only	0	--	--	--	--	--	--	--
White, only	168	124	73.8%	639	5.6%	13.7%	16.1%	64.5%
Multiracial/Other	37	***	***	***	***	***	***	***
TOTAL	779	558	71.6%	584	11.5%	14.2%	16.3%	58.1%

COUNTRY OF BIRTH	ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
	No.	Recent CD4 Test Result						
		No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
United States	731	540	73.9%	592	11.5%	13.9%	15.9%	58.7%
Foreign-born	25	12	48.0%	395	16.7%	25.0%	33.3%	25.0%
Africa	12	8	66.7%	452	12.5%	12.5%	37.5%	37.5%
Asia	4	***	***	***	***	***	***	***
Caribbean	2	***	***	***	***	***	***	***
Central America	4	***	***	***	***	***	***	***
Other	3	***	***	***	***	***	***	***
Unknown	23	6	26.1%	678	0.0%	16.7%	16.7%	66.7%
TOTAL	779	558	71.6%	584	11.5%	14.2%	16.3%	58.1%

\*\*\* Data withheld due to low population and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year.

**With Test:** Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

**Table 14 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2017**

SEX AT BIRTH	ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
	No.	Recent Viral Load Test Result			
		No. with Test	% with Test	% Suppressed	Median Unsuppressed
Male	516	358	69.4%	81.8%	15,339
Female	263	212	80.6%	79.2%	9,480
TOTAL	779	570	73.2%	80.9%	11,607

RACE/ETHNICITY	ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
	No.	Recent Viral Load Test Result			
		No. with Test	% with Test	% Suppressed	Median Unsuppressed
Hispanic	28	15	53.6%	80.0%	15,339
Non-Hispanic	751	555	73.9%	80.9%	11,154
American Indian/Alaska Native, only	0	--	--	--	--
Asian, only	4	***	***	***	***
Black, only	542	400	73.8%	78.3%	11,820
Native Hawaiian/Other Pacific Islander, only	0	--	--	--	--
White, only	168	124	73.8%	88.7%	40,556
Multiracial/Other	37	***	***	***	***
TOTAL	779	570	73.2%	80.9%	11,607

COUNTRY OF BIRTH	ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
	No.	Recent Viral Load Test Result			
		No. with Test	% with Test	% Suppressed	Median Unsuppressed
United States	731	549	75.1%	81.1%	11,260
Foreign-born	25	13	52.0%	76.9%	1,199
Africa	12	8	66.7%	87.5%	1,199
Asia	4	***	***	***	***
Caribbean	2	***	***	***	***
Central America	4	***	***	***	***
Other	3	***	***	***	***
Unknown	23	8	34.8%	75.0%	90,304
TOTAL	779	570	73.2%	80.9%	11,607

\*\*\* Data withheld due to low population and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year.

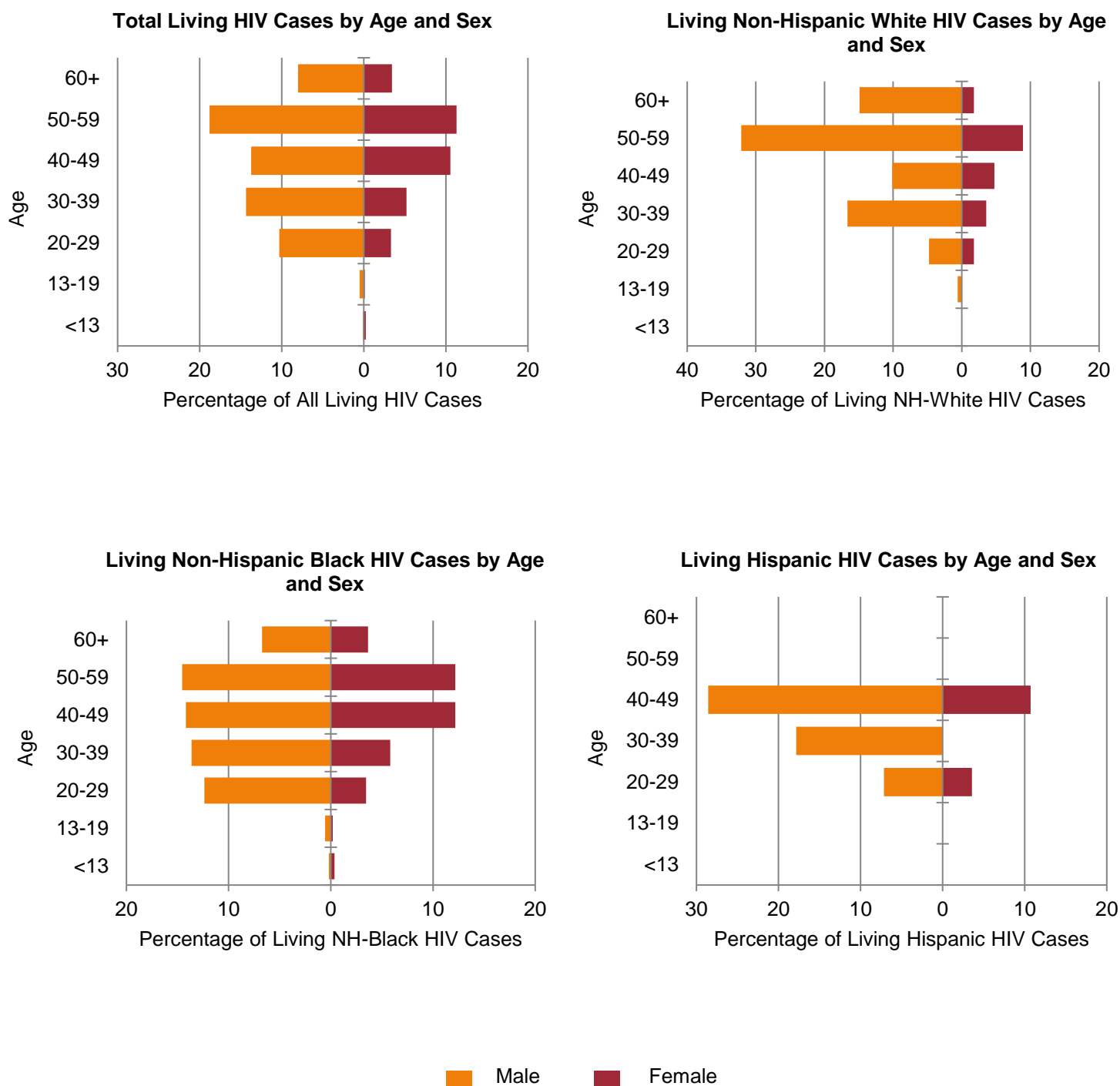
**With Test:** Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

## Section VII – HIV Cases by Expanded Demographics

**Figure 9 – Population Pyramids of Total Living HIV Cases by Current Age, Sex at Birth, and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017**



**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Table 15 – Total Living Male HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017**

TOTAL LIVING MALE HIV CASES						
AGE ON 12/31/2016		RACE/ETHNICITY				TOTAL MALES BY AGE GROUP
		Hispanic	Non- Hispanic Black, only	Non- Hispanic White, only	Non- Hispanic Other Race	
<13 (Pediatric)	Population	2,247	8,872	16,934	3,161	31,213
	Cases	0	1	0	0	1
	Rate	0.0	11.3	0.0	0.0	3.2
	Ratio (1 in X)	--	8,872	--	--	31,213
13-19	Population	1,013	5,426	10,057	1,619	18,116
	Cases	0	3	1	0	4
	Rate	0.0	55.3	9.9	0.0	22.1
	Ratio (1 in X)	--	1,808	10,057	--	4,528
20-29	Population	1,510	6,796	14,108	1,456	23,870
	Cases	2	68	8	3	81
	Rate	132.5	1,000.6	56.7	206.0	339.3
	Ratio (1 in X)	755	99	1,763	485	294
30-39	Population	1,609	5,704	13,562	1,181	22,056
	Cases	5	75	28	5	113
	Rate	310.8	1,314.9	206.5	423.4	512.3
	Ratio (1 in X)	321	76	484	236	195
40-49	Population	1,204	7,115	14,289	1,137	23,745
	Cases	8	78	17	5	108
	Rate	664.5	1,096.3	119.0	439.8	454.8
	Ratio (1 in X)	150	91	840	227	219
50-59	Population	766	7,097	19,141	1,025	28,029
	Cases	***	80	54	***	148
	Rate	***	1,127.2	282.1	***	528.0
	Ratio (1 in X)	***	88	354	***	189
60+	Population	532	5,991	22,752	1,065	30,340
	Cases	0	37	25	1	63
	Rate	0.0	617.6	109.9	93.9	207.6
	Ratio (1 in X)	--	161	910	1,065	481
TOTAL MALES BY RACE/ETHNICITY	Population	8,881	47,001	110,843	10,644	177,369
	Cases	21	342	133	22	518
	Rate	236.5	727.6	120.0	206.7	292.0
	Ratio (1 in X)	422	137	833	483	342

**Age on [date]:** Age group of living cases on the specified date.

**Total Living Male HIV Cases:** Reported HIV diagnoses with Male sex at birth with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Population:** Population estimate for 7/1/2016.

**Rate:** Number of HIV cases divided by the population multiplied by 100,000.

**Ratio (1 in X):** Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

**Table 16 – Total Living Female HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017**

TOTAL LIVING FEMALE HIV CASES						
AGE ON 12/31/2016		RACE/ETHNICITY				TOTAL FEMALES BY AGE GROUP
		Hispanic	Non- Hispanic Black, only	Non- Hispanic White, only	Non- Hispanic Other Race	
<13 (Pediatric)	Population	2,225	8,360	16,205	3,005	29,794
	Cases	0	2	0	0	2
	Rate	0.0	23.9	0.0	0.0	6.7
	Ratio (1 in X)	--	4,179	--	--	14,897
13-19	Population	1,045	5,329	9,621	1,527	17,523
	Cases	0	1	0	0	1
	Rate	0.0	18.8	0.0	0.0	5.7
	Ratio (1 in X)	--	5,329	--	--	17,523
20-29	Population	1,428	6,780	13,045	1,632	22,885
	Cases	1	19	3	3	26
	Rate	70.0	280.2	23.0	183.8	113.6
	Ratio (1 in X)	1,428	356	4,348	544	880
30-39	Population	1,523	6,791	13,395	1,574	23,283
	Cases	0	32	6	3	41
	Rate	0.0	471.2	44.8	190.6	176.1
	Ratio (1 in X)	--	212	2,232	524	567
40-49	Population	1,163	8,614	14,828	1,684	26,289
	Cases	3	67	8	5	83
	Rate	258.0	777.8	54.0	296.9	315.7
	Ratio (1 in X)	387	128	1,853	336	316
50-59	Population	826	7,877	18,678	1,448	28,829
	Cases	***	67	15	***	89
	Rate	***	850.6	80.3	***	308.7
	Ratio (1 in X)	***	117	1,245	***	323
60+	Population	666	8,056	25,300	1,549	35,571
	Cases	***	20	3	***	27
	Rate	***	248.3	11.9	***	75.9
	Ratio (1 in X)	***	402	8,433	***	1,317
TOTAL FEMALES BY RACE/ETHNICITY	Population	8,876	51,807	111,072	12,419	184,174
	Cases	7	208	35	19	269
	Rate	78.9	401.5	31.5	153.0	146.1
	Ratio (1 in X)	1,268	249	3,173	653	684

**Age on [date]:** Age group of living cases on the specified date.

**Total Living Female HIV Cases:** Reported HIV diagnoses with Female sex at birth with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

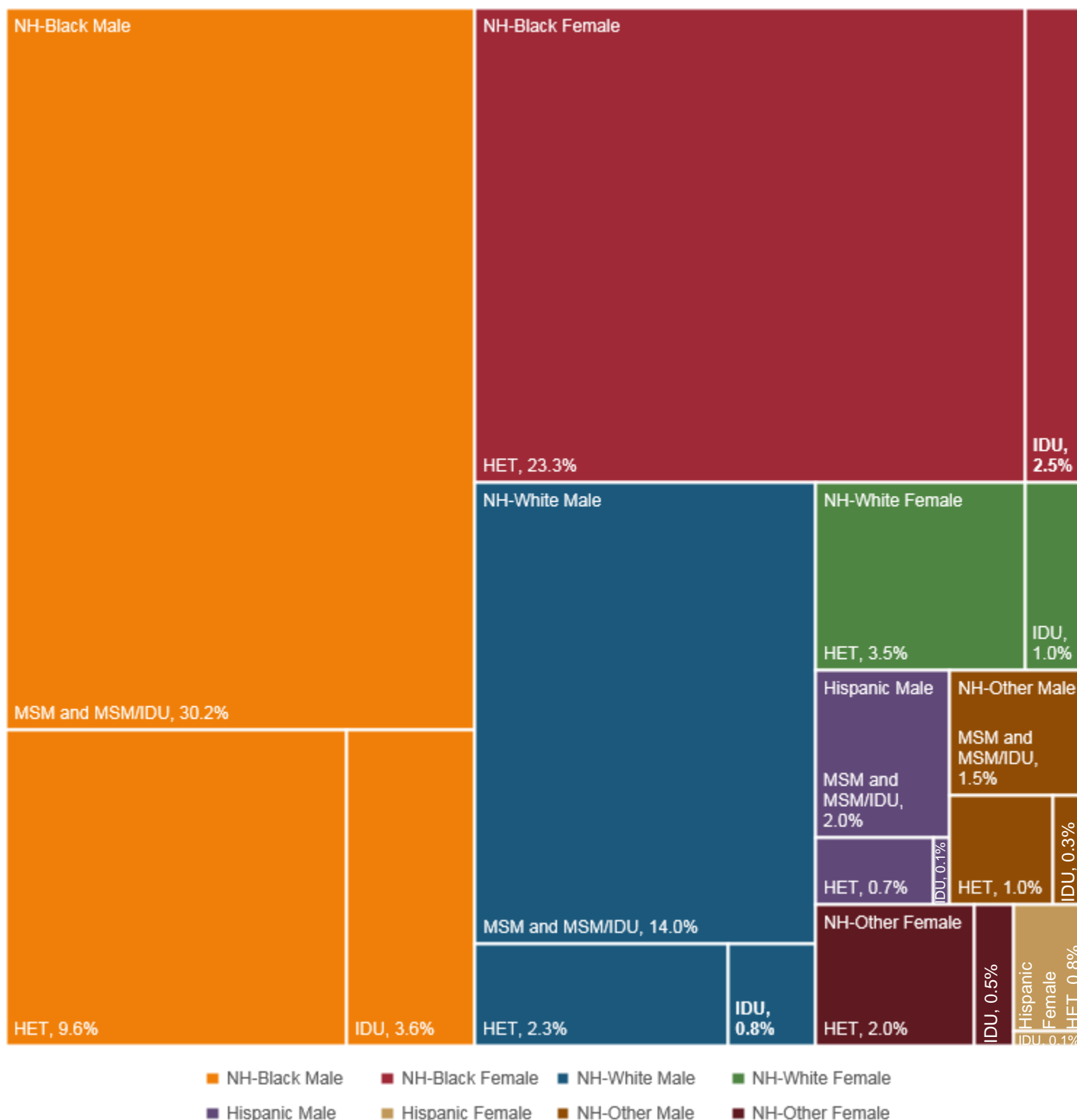
**Population:** Population estimate for 7/1/2016.

**Rate:** Number of HIV cases divided by the population multiplied by 100,000.

**Ratio (1 in X):** Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

## Section VIII – HIV Exposure Category

**Figure 10 – Proportion of Adult/Adolescent Total Living HIV Cases, by Estimated Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on 12/31/2016, Reported through 6/30/2017**



Other exposure category not shown (<1%)

Multiple imputation was used to estimate and adjust for missing transmission category



**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Men who have Sex with Men (MSM):** Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

**Injection Drug Use (IDU):** Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

**MSM/IDU:** Men who report a history of sexual contact with other men who also have engaged in injection drug use.

**Heterosexual Exposure (HET):** Men or women who report a history of sexual contact with a person of the opposite sex who is known to have an HIV infection or at high risk for an HIV infection. High risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue and artificial insemination.

**Table 17 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result, by Exposure Category and Sex at Birth, Reported through 6/30/2017**

EXPOSURE CATEGORY**	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES						
	No.	% of Total with Exposure	Linked to Care		Late HIV Diagnoses	First CD4 Test Result	
			% 1 mo.	% 3 mo.	%	%	Median Count
<b>With Exposure</b>	22	100.0%	72.7%	81.8%	***	86.4%	375
Men who have Sex with Men (MSM)	15	68.2%	73.3%	86.7%	***	86.7%	382
Injection Drug Users (IDU)	0	0.0%	--	--	--	--	--
Men who have Sex with Men and Inject Drugs (MSM/IDU)	0	0.0%	--	--	--	--	--
Heterosexual Exposure (HET)	7	31.8%	71.4%	71.4%	***	85.7%	340
Other Exposure	0	0.0%	--	--	--	--	--
<b>No Reported Exposure</b>	12		66.7%	83.3%	***	83.3%	671
<b>TOTAL</b>	34		70.6%	82.4%	20.6%	85.3%	382

MALE EXPOSURE CATEGORY**	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES						
	No.	% of Total with Exposure	Linked to Care		Late HIV Diagnoses	First CD4 Test Result	
			% 1 mo.	% 3 mo.	%	%	Median Count
<b>With Exposure</b>	18	100.0%	77.8%	88.9%	88.9%	***	***
Men who have Sex with Men (MSM)	15	83.3%	***	***	***	***	***
Injection Drug Users (IDU)	0	0.0%	--	--	--	--	--
Men who have Sex with Men and Inject Drugs (MSM/IDU)	0	0.0%	--	--	--	--	--
Heterosexual Exposure (HET)	3	16.7%	***	***	***	***	***
Other Exposure	0	0.0%	--	--	--	--	--
<b>No Reported Exposure</b>	7		6	85.7%	85.7%	***	***
<b>TOTAL</b>	25		22	80.0%	88.0%	6	24.0%

FEMALE EXPOSURE CATEGORY**	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES						
	No.	% of Total with Exposure	Linked to Care		Late HIV Diagnoses	First CD4 Test Result	
			% 1 mo.	% 3 mo.	%	%	Median Count
<b>With Exposure</b>	4	100.0%	***	***	***	***	***
Injection Drug Users (IDU)	0	0.0%	--	--	--	--	--
Heterosexual Exposure (HET)	4	100.0%	***	***	***	***	***
Other Exposure	0	0.0%	--	--	--	--	--
<b>No Reported Exposure</b>	5		***	***	***	***	***
<b>TOTAL</b>	9		44.4%	66.7%	***	77.8%	488

\*\* 2016 reported HIV exposure data are preliminary

\*\*\* Data withheld due to low population and/or case counts

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Table 18 – Adult/Adolescent Living HIV Cases Alive on 12/31/2016, by Exposure Category and Sex at Birth, Reported through 6/30/2017**

EXPOSURE CATEGORY	ADULT/ADOLESCENT TOTAL LIVING HIV CASES		
	No.	% of Total with Exposure	% Living with AIDS
<b>With Exposure</b>	595	100.0%	56.3%
Men who have Sex with Men (MSM)	285	47.9%	48.8%
Injection Drug Users (IDU)	37	6.2%	67.6%
Men who have Sex with Men and Inject Drugs (MSM/IDU)	14	2.4%	78.6%
Heterosexual Exposure (HET)	257	43.2%	61.9%
Other Exposures	2	0.3%	50.0%
<b>No Reported Exposure*</b>	184		38.6%
<b>TOTAL</b>	779		52.1%

MALE EXPOSURE CATEGORY	ADULT/ADOLESCENT TOTAL LIVING HIV CASES		
	No.	% of Total with Exposure	% Living with AIDS
<b>With Exposure</b>	411	100.0%	56.4%
Men who have Sex with Men (MSM)	285	69.3%	48.8%
Injection Drug Users (IDU)	21	5.1%	71.4%
Men who have Sex with Men and Inject Drugs (MSM/IDU)	14	3.4%	78.6%
Heterosexual Exposure (HET)	90	21.9%	74.4%
Other Exposures	1	0.2%	0.0%
<b>No Reported Exposure</b>	105		41.0%
<b>TOTAL</b>	516		53.3%

FEMALE EXPOSURE CATEGORY	ADULT/ADOLESCENT TOTAL LIVING HIV CASES		
	No.	% of Total with Exposure	% Living with AIDS
<b>With Exposure</b>	184	100.0%	56.0%
Injection Drug Users (IDU)	16	8.7%	62.5%
Heterosexual Exposure (HET)	167	90.8%	55.1%
Other Exposures	1	0.5%	100.0%
<b>No Reported Exposure*</b>	79		35.4%
<b>TOTAL</b>	263		49.8%

\* Includes 4 HIV cases with Presumed Female Heterosexual exposure.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Percent Living with AIDS:** The percent of reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year

**Table 19 – Adult/Adolescent Total Living HIV Cases by Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on 12/31/2016 and Reported through 6/30/2017**

Exposure Category	Adult/Adolescent Total Living HIV Cases					
	Race/Ethnicity					
	Hispanic		Non-Hispanic, Black, only		Non-Hispanic, White, only	
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure
<b>With Exposure</b>	20	100.0%	408	100.0%	130	100.0%
Men who have Sex with Men (MSM)	11	55.0%	182	44.6%	81	62.3%
Injection Drug Users (IDU)	0	0.0%	23	5.6%	9	6.9%
Men who have Sex with Men and Inject Drugs (MSM/IDU)	***	***	8	2.0%	5	3.8%
Heterosexual Exposure (HET)	***	***	193	47.3%	35	26.9%
Other Exposures	0	0.0%	2	0.5%	0	0.0%
<b>No Reported Exposure*</b>	8		134		38	
<b>TOTAL</b>	28		542		168	

Male Exposure Category	Adult/Adolescent Total Living HIV Cases					
	Race/Ethnicity					
	Hispanic		Non-Hispanic, Black, only		Non-Hispanic, White, only	
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure
<b>With Exposure</b>	16	100.0%	271	100.0%	104	100.0%
Men who have Sex with Men (MSM)	11	68.8%	182	67.2%	81	77.9%
Injection Drug Users (IDU)	0	0.0%	15	5.5%	***	***
Men who have Sex with Men and Inject Drugs (MSM/IDU)	***	***	8	3.0%	***	***
Heterosexual Exposure (HET)	***	***	65	24.0%	14	13.5%
Other Exposures	0	0.0%	1	0.4%	0	0.0%
<b>No Reported Exposure</b>	5		69		29	
<b>TOTAL</b>	21		340		133	

FEMALE EXPOSURE CATEGORY	ADULT/ADOLESCENT TOTAL LIVING HIV CASES					
	Race/Ethnicity					
	Hispanic		Non-Hispanic, Black, only		Non-Hispanic, White, only	
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure
<b>With Exposure</b>	4	100.0%	137	100.0%	26	100.0%
Injection Drug Users (IDU)	***	***	8	5.8%	5	19.2%
Heterosexual Exposure (HET)	***	***	128	93.4%	21	80.8%
Other Exposures	0	0.0%	1	0.7%	0	0.0%
<b>No Reported Exposure*</b>	3		65		9	
<b>TOTAL</b>	7		202		35	

\* Includes 1 Hispanic case and 3 non-Hispanic black cases with Presumed Female Heterosexual exposure

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Table 20 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Exposure Category, Reported through 6/30/2017**

EXPOSURE CATEGORY	ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
	No.	Recent CD4 Test Results						
		No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
<b>With Exposure</b>	595	438	73.6%	562	11.9%	15.8%	16.7%	55.7%
Men who have Sex with Men (MSM)	285	203	71.2%	563	11.3%	15.3%	15.8%	57.6%
Injection Drug Users (IDU)	37	22	59.5%	313	18.2%	40.9%	18.2%	22.7%
Men who have Sex with Men and Inject Drugs (MSM/IDU)	14	***	***	***	***	***	***	***
Heterosexual Exposure (HET)	257	201	78.2%	594	12.4%	12.9%	17.9%	56.7%
Other Exposures	2	***	***	***	***	***	***	***
<b>No Reported Exposure*</b>	184	120	65.2%	680	10.0%	8.3%	15.0%	66.7%
<b>TOTAL</b>	779	558	71.6%	584	11.5%	14.2%	16.3%	58.1%

\* Includes 4 cases with Presumed Female Heterosexual exposure

**Table 21 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Exposure Category, Reported through 6/30/2017**

EXPOSURE CATEGORY	ADULT/ADOLESCENT TOTAL LIVING HIV CASES					
	No.	Recent Viral Load Test Results				Median Count
		No. with Test	% with Test	% Suppressed		
<b>With Exposure</b>	595	453	76.1%	80.8%		14,460
Men who have Sex with Men (MSM)	285	208	73.0%	81.3%		15,339
Injection Drug Users (IDU)	37	23	62.2%	52.2%		84,862
Men who have Sex with Men and Inject Drugs (MSM/IDU)	14	***	***	***		***
Heterosexual Exposure (HET)	257	210	81.7%	83.8%		11,154
Other Exposures	2	***	***	***		***
<b>No Reported Exposure*</b>	184	117	63.6%	81.2%		5,290
<b>TOTAL</b>	779	570	73.2%	80.9%		11,607

\* Includes 4 cases with Presumed Female Heterosexual exposure

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year.

**CD4 With Test:** Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year.

**Viral Load With Test:** Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

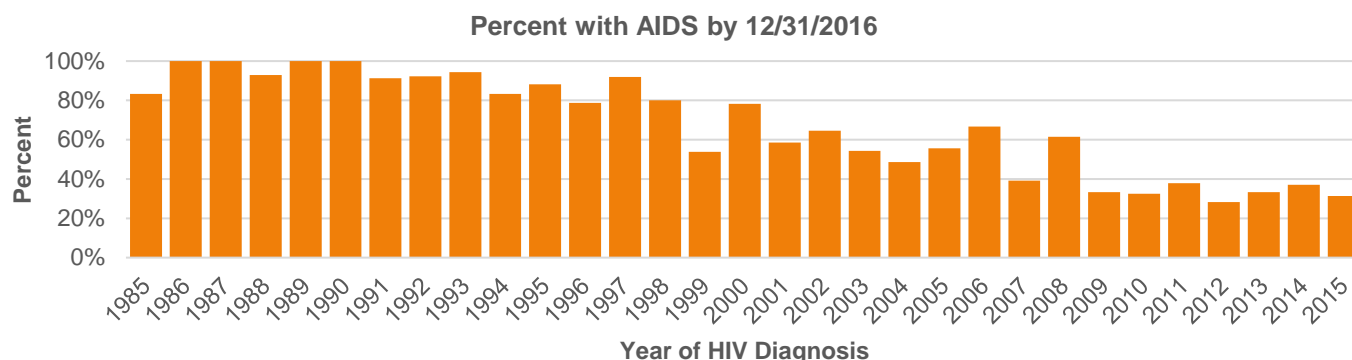
**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

## Section IX – Disease Progression and Mortality

**Figure 11 – Trends in Disease Progression by Year of HIV Diagnosis, 1985-2015, Reported through 6/30/2017**

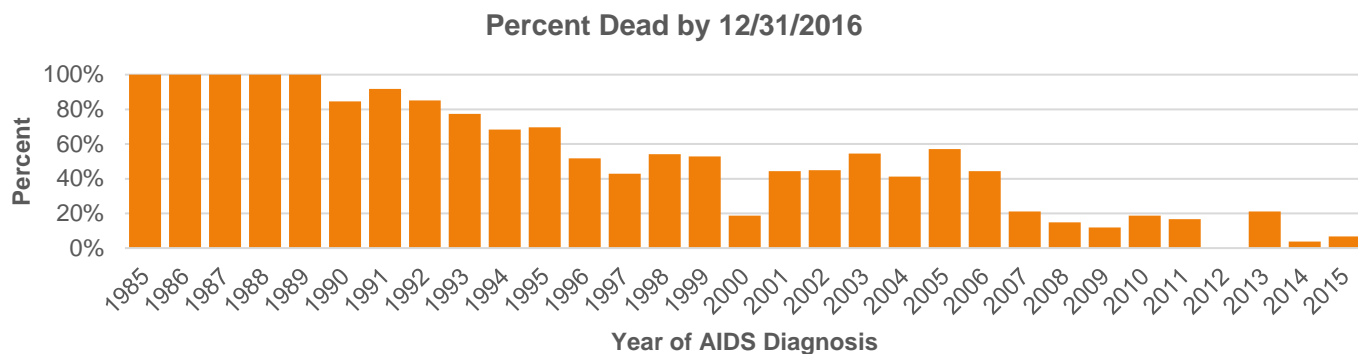
Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis by 12/31/2015 (Adult/Adolescent Reported HIV Diagnoses), Number of Adult/Adolescent Reported HIV Cases with an AIDS Diagnosis by 12/31/2016 (Reported AIDS Diagnoses), Percent by Year of HIV Diagnosis of Adult/Adolescent Reported HIV Diagnoses with a Reported AIDS Diagnosis by 12/31/2016, the Average Years from HIV Diagnosis to AIDS Diagnosis for Cases with an AIDS Diagnosis, and the Percent by Year of HIV Diagnosis of Reported Adult/Adolescent HIV Diagnoses with a Reported AIDS Diagnosis at 1 Year, 2 Years, 5 Years, and 10 Years after HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2015, as Reported by Name through 6/30/2017



YEAR OF HIV DIAGNOSIS	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES							
	No.	Reported AIDS Diagnoses			Percent with AIDS by Years After HIV Diagnosis			
		No.	% with AIDS	Mean Years from HIV to AIDS	1 Year	2 Years	5 Years	10 Years
<1985	2	2	100.0%	10.0	50.0%	50.0%	50.0%	50.0%
1985	6	5	83.3%	9.7	16.7%	16.7%	33.3%	50.0%
1986	12	12	100.0%	6.4	41.7%	41.7%	50.0%	66.7%
1987	16	16	100.0%	6.0	37.5%	37.5%	56.3%	81.3%
1988	14	13	92.9%	2.7	57.1%	57.1%	71.4%	92.9%
1989	21	21	100.0%	2.2	61.9%	61.9%	85.7%	95.2%
1990	32	32	100.0%	4.5	37.5%	46.9%	68.8%	90.6%
1991	23	21	91.3%	2.9	52.2%	56.5%	69.6%	87.0%
1992	26	24	92.3%	1.7	65.4%	65.4%	84.6%	88.5%
1993	18	17	94.4%	1.5	77.8%	83.3%	88.9%	88.9%
1994	24	20	83.3%	2.5	58.3%	66.7%	66.7%	75.0%
1995	34	30	88.2%	3.4	44.1%	47.1%	64.7%	79.4%
1996	33	26	78.8%	1.9	51.5%	60.6%	66.7%	75.8%
1997	25	23	92.0%	2.7	64.0%	64.0%	68.0%	84.0%
1998	25	20	80.0%	1.6	64.0%	68.0%	68.0%	76.0%
1999	26	14	53.8%	1.7	38.5%	42.3%	46.2%	50.0%
2000	23	18	78.3%	5.3	26.1%	30.4%	52.2%	65.2%
2001	29	17	58.6%	0.6	51.7%	51.7%	58.6%	58.6%
2002	31	20	64.5%	1.4	48.4%	51.6%	61.3%	64.5%
2003	35	19	54.3%	1.1	42.9%	42.9%	48.6%	54.3%
2004	35	17	48.6%	1.8	37.1%	40.0%	42.9%	45.7%
2005	45	25	55.6%	2.3	37.8%	40.0%	44.4%	48.9%
2006	30	20	66.7%	1.0	53.3%	53.3%	60.0%	66.7%
2007	46	18	39.1%	1.3	28.3%	30.4%	37.0%	--
2008	39	24	61.5%	1.0	48.7%	51.3%	56.4%	--
2009	42	14	33.3%	1.6	21.4%	23.8%	28.6%	--
2010	40	13	32.5%	0.9	22.5%	27.5%	32.5%	--
2011	29	11	37.9%	0.9	27.6%	34.5%	34.5%	--
2012	46	13	28.3%	0.5	23.9%	28.3%	--	--
2013	42	14	33.3%	0.6	28.6%	28.6%	--	--
2014	54	20	37.0%	0.3	35.2%	35.2%	--	--
2015	32	10	31.3%	0.7	25.0%	--	--	--
TOTAL	935	569	60.9%	2.3	40.9%	43.9%	51.0%	57.2%

**Figure 12 – Trends in Survival Times by Year of AIDS Diagnosis, 1985-2015, Reported through 6/30/2017**

Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with an AIDS Diagnosis by 12/31/15 (Adult/Adolescent Reported AIDS Diagnoses), Number of Adult/Adolescent Reported AIDS Diagnosis Reported to Have Died of Any Cause by 12/31/2016 (Reported AIDS Deaths), Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses with a Reported AIDS Death (Percent Dead) by 12/31/2016, the Average Years from AIDS Diagnosis to Death for Cases that have Died, and the Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses Not Reported to Have Died (Percent Alive) at 1 Year, 2 Years, 5 Years, and 10 Years after AIDS Diagnosis, by Year of AIDS Diagnosis from 1985 through 2015, as Reported by Name through 6/30/2017



YEAR OF AIDS DIAGNOSIS	ADULT/ADOLESCENT REPORTED AIDS DIAGNOSES							
	Reported AIDS Deaths				Percent Alive by Years After AIDS Diagnosis			
	No.	No.	% Dead	Mean Years from AIDS to Death	1 Year	2 Years	5 Years	10 Years
<1985	1	1	100.0%	0.0	0.0%	0.0%	0.0%	0.0%
1985	1	1	100.0%	2.9	100.0%	100.0%	0.0%	0.0%
1986	5	5	100.0%	1.1	40.0%	20.0%	0.0%	0.0%
1987	6	6	100.0%	2.5	50.0%	16.7%	16.7%	16.7%
1988	8	8	100.0%	2.3	62.5%	50.0%	12.5%	0.0%
1989	14	14	100.0%	2.1	85.7%	50.0%	0.0%	0.0%
1990	13	11	84.6%	3.6	76.9%	61.5%	38.5%	23.1%
1991	12	11	91.7%	2.4	83.3%	58.3%	16.7%	8.3%
1992	27	23	85.2%	3.0	85.2%	59.3%	22.2%	22.2%
1993	22	17	77.3%	2.9	72.7%	50.0%	31.8%	27.3%
1994	19	13	68.4%	3.2	89.5%	52.6%	47.4%	42.1%
1995	23	16	69.6%	4.2	73.9%	56.5%	52.2%	43.5%
1996	29	15	51.7%	4.9	86.2%	79.3%	72.4%	58.6%
1997	21	9	42.9%	5.3	81.0%	81.0%	81.0%	61.9%
1998	24	13	54.2%	6.7	83.3%	83.3%	79.2%	62.5%
1999	17	9	52.9%	5.7	88.2%	88.2%	70.6%	58.8%
2000	16	3	18.8%	7.1	100.0%	100.0%	87.5%	87.5%
2001	18	8	44.4%	5.1	88.9%	83.3%	72.2%	66.7%
2002	20	9	45.0%	3.5	85.0%	80.0%	65.0%	60.0%
2003	22	12	54.5%	4.8	81.8%	77.3%	68.2%	63.6%
2004	17	7	41.2%	4.2	82.4%	76.5%	76.5%	64.7%
2005	21	12	57.1%	4.3	81.0%	76.2%	66.7%	42.9%
2006	27	12	44.4%	2.5	81.5%	81.5%	63.0%	55.6%
2007	19	4	21.1%	1.1	84.2%	84.2%	78.9%	--
2008	27	4	14.8%	1.8	92.6%	92.6%	85.2%	--
2009	17	2	11.8%	1.7	94.1%	94.1%	88.2%	--
2010	16	3	18.8%	0.7	87.5%	81.3%	81.3%	--
2011	12	2	16.7%	2.1	91.7%	91.7%	83.3%	--
2012	19	0	0.0%	--	100.0%	100.0%	--	--
2013	19	4	21.1%	1.0	84.2%	78.9%	--	--
2014	26	1	3.8%	0.3	96.2%	96.2%	--	--
2015*	15	1	6.7%	0.3	93.3%	--	--	--
TOTAL	553	256	46.3%	3.6	84.8%	76.5%	65.1%	59.0%

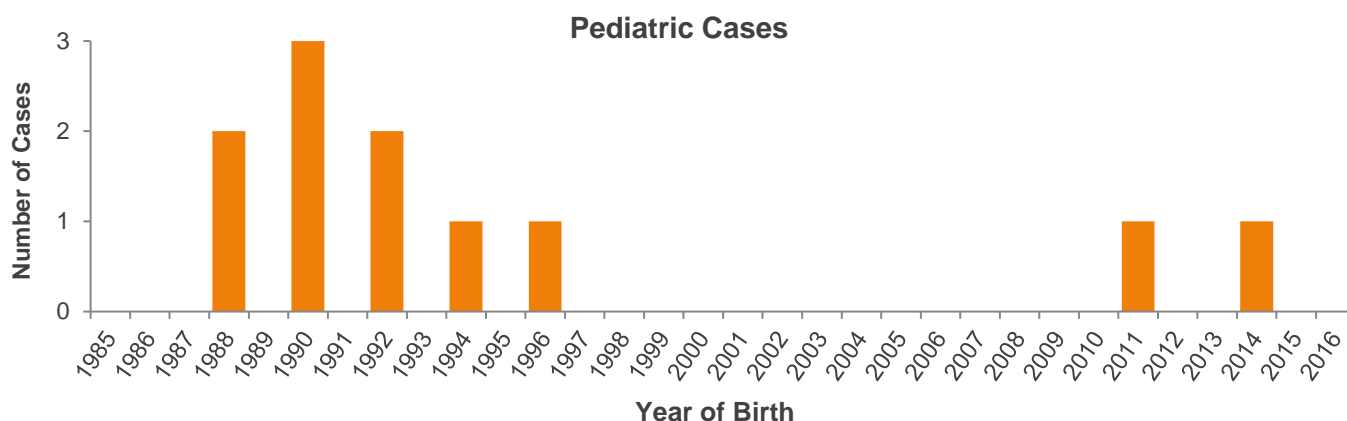
\*2015 AIDS deaths are preliminary.



## Section X – Pediatric Cases

**Figure 13 – Trends in Pediatric HIV Cases, 1985-2016, Reported through 6/30/2017**

Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis (Pediatric Reported HIV Diagnoses) by Year of Birth, by Year of HIV Diagnosis, by Year of AIDS Diagnosis, and by Year of Death Due to Any Cause, and Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis and Not Reported to have Died as of December 31<sup>st</sup> of Each Year (Pediatric Total Living HIV Cases) from 1985 through 2016, as Reported by Name through 6/30/2017



YEAR	PEDIATRIC REPORTED HIV DIAGNOSES			PEDIATRIC TOTAL LIVING HIV CASES	
	No. by Year of Birth	No. by Year of HIV Diagnosis	No. by Year of AIDS Diagnosis	No. by Year of Death	No. Alive on 12/31 of Each Year
<1985	1	0	0	0	--
1985	0	0	0	0	0
1986	0	0	0	0	0
1987	0	0	0	0	0
1988	2	1	1	0	0
1989	0	0	0	0	0
1990	3	1	0	0	1
1991	0	0	0	0	1
1992	2	1	0	0	2
1993	0	0	0	0	2
1994	1	3	3	0	4
1995	0	0	0	1	3
1996	1	2	2	1	4
1997	0	0	0	0	4
1998	0	0	1	0	4
1999	0	0	0	1	3
2000	0	0	0	0	3
2001	0	0	0	0	4
2002	0	1	0	0	5
2003	0	0	0	0	5
2004	0	0	0	0	5
2005	0	0	0	0	5
2006	0	0	0	0	5
2007	0	1	0	0	6
2008	0	0	0	0	6
2009	0	0	0	0	6
2010	0	0	0	1	5
2011	1	1	1	0	6
2012	0	0	0	0	6
2013	0	0	0	1	5
2014	1	1	0	0	6
2015	0	0	0	0	7
2016	0	0	0	0	7
TOTAL	12	12	8	5	--

**Table 22 – Pediatric HIV Total Living HIV Cases, Diagnosed in Maryland, Alive on 12/31/2016, by Jurisdiction, Reported through 6/30/2017**

JURISDICTION OF RESIDENCE AT DIAGNOSIS	PEDIATRIC TOTAL LIVING HIV CASES	
	No.	% of Total
Calvert	2	28.6%
Charles	4	57.1%
Saint Mary's	1	14.3%
<b>TOTAL</b>	7	100.0%

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Table 23 – Pediatric Total Living HIV Cases, Diagnosed in Maryland, by Sex at Birth and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017**

SEX AT BIRTH	PEDIATRIC TOTAL LIVING HIV CASES	
	No.	% of Total
Male	3	42.9%
Female	4	57.1%
<b>TOTAL</b>	<b>7</b>	<b>100.0%</b>

RACE/ETHNICITY	PEDIATRIC TOTAL LIVING HIV CASES	
	No.	% of Total
Hispanic	0	0.0%
Non-Hispanic	7	100.0%
American Indian/ Alaska Native, only	0	0.0%
Asian, only	0	0.0%
Black, only	6	85.7%
Native Hawaiian/Other Pacific Islander, only	0	0.0%
White, only	1	14.3%
Multiracial/Other	0	0.0%
<b>TOTAL</b>	<b>7</b>	<b>100.0%</b>

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

# Glossary of Terms

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Age at AIDS Diagnosis:** Age group at time of initial AIDS diagnosis.

**Age at HIV Diagnosis:** Age group at time of initial HIV diagnosis.

**Age on [date]:** Age group of living cases on the specified date.

**AIDS Deaths:** Reported HIV diagnoses with an AIDS diagnosis that have died due to any cause.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

**CD4 With Test:** Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Corrections:** Residence in a state or federal prison. Does not include local jails and detention centers.

**Current Residence:** Jurisdiction of residence from the most recent report since 1/1/2009.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**Jurisdiction of Current Residence:** Jurisdiction of residence from the most recent report since 1/1/2009.

**Jurisdiction of Residence:** Jurisdiction of residence at diagnosis or current residence.

**Jurisdiction of Residence at AIDS Diagnosis:** Jurisdiction of residence at time of initial AIDS diagnosis.

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at the later time of initial HIV diagnosis or time of initial AIDS diagnosis.

**Jurisdiction of Residence at HIV Diagnosis:** Jurisdiction of residence at time of initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Living HIV Cases with AIDS:** Reported HIV diagnoses with an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Living HIV Cases without AIDS:** Reported HIV diagnoses without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Mean Years from HIV Diagnosis:** Mean or average number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Mean Years from AIDS diagnosis to AIDS Death:** Mean or average number of years from initial AIDS diagnosis to death for adult/adolescent reported AIDS diagnoses with a reported death.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Percent Change:** The percent change in number of adult/adolescent total living HIV cases from residence at diagnosis to current residence.

**Percent Alive by Years after AIDS Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses not reported to have died at 1 year, 2 years, 5 years and 10 years after initial AIDS diagnosis, by year of AIDS diagnosis.

**Percent Late HIV Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Percent with AIDS:** Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis by 12/31/2016.

**Percent with AIDS by Years after HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis at 1 year, 2 years, 5 years and 10 years after HIV diagnosis.

**Population:** Population estimate for 7/1/2016.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Rate:** Number of HIV cases divided by the population multiplied by 100,000.

**Ratio (1 in X):** Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year.

**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year.

**Reported AIDS Deaths:** Reported HIV diagnoses with an AIDS diagnosis, reported to have died of any cause during the specified year.

**Reported AIDS Diagnoses:** Reported HIV diagnoses with an initial AIDS diagnosis during the specified year.

**Reported HIV Diagnoses:** Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

**Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

**Retained in HIV Care:** HIV Diagnosed with a CD4 test result performed in the specified year.

**Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Viral Load With Test:** Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.